BULLETIN

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IA Iranian American Medical Association MA

IAMA Bulletin

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A PUBLICATION OF THE IRANIAN AMERICAN MEDICAL ASSOCIATION
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2. *The social and scientific views of the authors are not necessarily IAMA's views.*
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4. *Please enclose the original manuscript as well a translation.*
5. *Pictures and sketches should be sent separately.*
6. *Quoting from IAMA's Bulletin is permissible.*

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A Note from the Editor

One more time I am writing an editorial for IAMA's bulletin. I have always reminded myself, my colleagues and fellow IAMA members that the best product of our organization is a unique friendship that connects us, our families, and our spirits together.

Most of us are physicians or some way related to medical science, most of us have the same backgrounds and most of us have similar memories of the past.

We came together for many reasons, the first of which is to help our communities and people who need medical help, financial or otherwise. Everyone has access to us for guidance and consultation.

IAMA has constructed a clinic building in Bam-Iran and helped many during earthquakes, which are not rare in our land - in fact we are helping flood victims right now.

We have annual scientific meetings by which we learn about the latest developments in medicine. All this gives us enjoyment and fulfills our hearts with love. We have the responsibility to keep IAMA active and going forward and we have to preserve and broaden our agenda for future generations. This bulletin demonstrates our achievements and exhibits what has been accomplished during the last year. I wish success for all and upsurging IAMA in the coming year.

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My best to all!
Parviz Pishvazadeh, MD
Editor-in-Chief

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President's Message

Dear Members and Friends,

IAMA's twenty-sixth annual meeting in Chicago was a great success, thanks to our local organizing committee chaired by Dr. Mohammad Shokouh-Amiri and the newly revived, energetic Illinois chapter. I think all the participants had a great and memorable time during this meeting.

Scientific part of the meeting was very well attended and was very interactive. There were 61 eligible participants and those who filled out their evaluation forms (required by our sponsoring CME accreditation agency) have already received their CME certificates. Participants were eligible for up to 12 hours of AMA Category 1 credit hours. If anyone has forgotten to send their evaluation form, may still send them to IAMA central office to receive their CME credit certificates. Thanks to Dr. Ali Nourbakhsh, our CME committee chair who put a lot of energy into it to make sure this important part of annual meeting goes smoothly. Three of our young investigators were awarded a certificate and $500 cash for their great presentations and two other young members of IAMA received travel grants, thanks to Laila Armin Young Investigator Awards and donation from SUSMA.

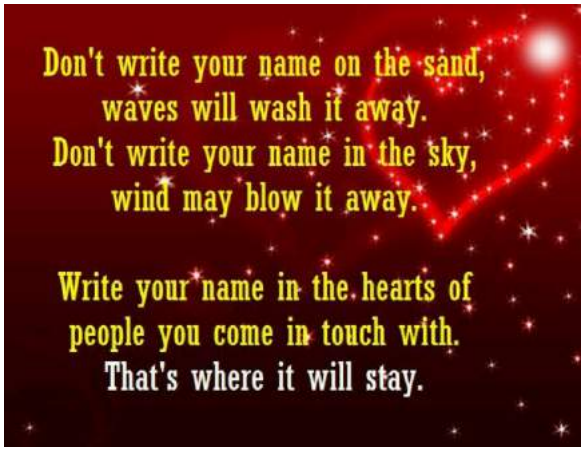
Dr. Ali Keshavarzian delivered his keynote presentation on "Microbiota/Host Interaction in Parkinson Disease" which was very enlightening and a great sense of pride for our members, and the cultural speaker, Dr. Frank Lewis surprised all the participants of the depth of his knowledge about Iran's landmark and historical events, literature and poetry.

This year, we honored Dr. Keyvan Nouri,an established scholar, researcher and a dynamic clinician. During our Gala, which was attended by 150 members & friends, more than $23,000 was raised, thanks to the generous donations from members and also the gifts that were donated to be sold during silent auction and raffle drawing.

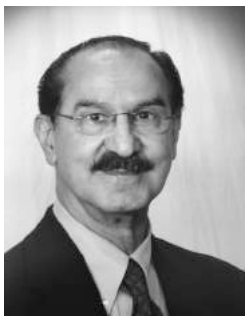
All of our kind donors should already have received their acknowledgement letters. If any has not received it, please let me know by sending me a short email to: h.shokouhamiri@iama.org.

IAMA is lucky that Dr. Shervin Mortazavi has accepted the nomination of President Elect & will work closely with me until the next meeting in New Jersey when I finish my tenure presidency, so he will assume the role of president. I wish him all success and luck.

Financially, IAMA is in a stable shape but can be even better if all of our members renew their memberships. Donate as much as you can because any organizations is strong with its members and its financial status. IAMA is working to send another multidisciplinary team to Iran sometime in the Spring of 2020, so please, anyone who wants to join the voluntary humanitarian work, contact me or Dr. Ganchi so we can start taking care of the logistics of this trip.



Be in IAMA with IAMA



Dear friends, members and future members of IAMA

Here we are in pride at the 26th Annual Establishment of IAMA. IAMA proudly celebrated its 26th birthday this May 2019 in Chicago, IL. IAMA administration, the founders and trustees are proud of the wonderful and almost perfect job the local organizing committee, consisting of Dr. M. Shokouh-Amiri, the previous president of IAMA, Dr. B. Sadegi, Dr. B. Hajihossainlou, Dr. K. Hejazi, Dr. K. Katouzian, Mrs. Jeri Sadegi and Mrs. S. Shilmoun (Kewarkis), MBA, did in cooperation with the newly established Board of the Chicago Chapter. On behalf of the Boards thank you very much for the great job.

The Board of Directors under the directorship and guidance of Dr. H. Shokouh-Amiri, President of IAMA, have done a great job including arrangements of the annual meeting program, Friday reception night, Saturday and Sunday early morning breakfast, CME in the morning and afternoon, annual membership meeting and above all keynote speaker, Dr. Ali Keshavarzian, MD, Professor of Medicine - Rush University Medical Center, gave an outstanding speech regarding *"Microbiota/Host Interaction in Parkinson Disease".* Cultural speaker, Frank Lewis, Ph.D., Professor in Persian and Middle Eastern Culture - University of Chicago *"Iranian and American Encounters"*, which was an outstanding lecture on behalf of the Board of IAMA thank you very much. The Gala night was also very memorable with good programs of entertainment and speeches. Monday morning was a meeting for all members of the Boards and Chapters, which was very successful. It was decided to have the 27th Anniversary Meeting of IAMA in NJ. I should also thank Dr. A. Nourbakhsh, Chair of CME Committee, for his outstanding job.

The big news is that Dr. S. Mortazavi, previous president of NJ chapter was elected as President-elect of IAMA. He starts his official work on July 1, 2020. Congratulations. All chapter administrators have done all their best to advance the goals of IAMA. Thank you. Founders and trustees of IAMA have have been in very close cooperation with the Board of Directors, too.

Unfortunately again, several unfortunate natural disasters and floods, made many of our fellow country Iranians in the upper west side of Iran homeless and in need of living necessities. IAMA started fundraising but it has not been as successful as it was for BAM earthquake. The IAMA Medical Center in BAM is functional and offering medical, dental, counseling, and a water and food lab to serve three neighboring states. Many thanks to the work of Dr. A. Esmaeli in Bam and Dr. Ali Maghsoudi, Secretary General of IAMA, in Kerman, Iran, and the Board of Directors and Trustees of IAMA in Iran, whom without heir help we would be nowhere.

Regarding the transfer of money to Iran for BAM and Kermanshah flood victims, we have been trying very hard in different directions in spite of having straightforward permission from OFAC to send money by authorized agents, but almost all of them refused to do that. Recently we have negotiated with a company who has trade with Iran and permit to do so, which is in progress. Hopefully at the end, we will be able to accomplish our humanitarian mission as promised.

IAMA may arrange to have a scientific and humanitarian trip to Iran next year to visit different medical schools and work at IAMA Medical Center in Bam. Let us know your intentions, ideas and comments in this regard too.

Please continue being a member of your organization, IAMA, and encourage your friends to become members too. IAMA membership counts to support each other and progress with more power.

Regarding the IAMA Medical Center in Bam, both Dr. A. Esmaeli and Dr. A. Maghsoudi are working to finalize the document of ownership of the Center to IAMA and have been informed the different sections are active but not in the way that we were expecting. Our goal is to go to Bam as a group to make some changes so the Medical Center would function the way it was intended. This plaque has been placed in the entrance of the Medical Center to acknowledge the big donors for this humanitarian project.

Amir Ganchi

Save the Date

27th Annual Meeting

May 22 – 25, 2020

New Jersey

Meet old friends…. Make new friends
Show the power of your organization

IAMA is now on social media! This opportunity has been created by the sincere efforts of Dr. M. Shokouh-Amiri and Dr. K. Katouzian. Connect with us through our social media accounts to stay updated with upcoming IAMA events.

IAMA PUBLIC AWARENESS IN HEALTH ISSUES

According to the Bylaws, IAMA has started "Public Awareness in Health Issues" in the medical and allied fields for Iranians in the United States. This program will alternate between the NY and NJ Chapters every other month. IAMA would like to encourage all other chapters to initiate this program in the state, which is part of the IAMA Bylaws. If you don't have a chapter in your area, we encourage you to make one or you can call the IAMA Office to discuss ways to promote this program.

If you are interested in being a speaker in the medical and allied topics at one of these seminars, please email IAMA at iama@iama.org or calling the office at 973-595-8888. Please be sure to include your topic and your information.

Thank you for your support in helping to promote public health awareness.

Contact and get information of IAMA in social media.

Iranians, historically the most civilized nation on the earth

Important contributions to the world by Iranians

The Persian civilization is recognized one of the most advanced and modern civilizations of its time. They were very advanced in almost every field of life. From medical to transport and from food to chemical industry, Persian people have invented a lot of things which we are still using in our daily lives. We should admire them because they gave new ideas and today we are making our lives full of comfort.

1. Animation

Though animation is considered to be a modern advancement that has grown by leaps and bounds in the last few decades, it actually dates back to Persian history. A 5,200 years old earthenware goblet was discovered in Sistan and Baluchistan province's Burnt City, where one can view a series of drawings of a goat, jumping towards a tree and eating leaves. Interestingly, sequences of this image are found in many other goblets all through medieval Islamic Persia. This piece of art was discovered by Italian archaeologists from a burial site in Persia. Though its relevance wasn't immediately understood, the goblet found its way to top Persian inventions list.

2. Parthian Battery – 250 B.C.

Now, that is how the ancient Persian battery looked like! And, yes, it did work like a charm. The picture you see is that of a Parthian battery made from a metal tube, ceramic pot, and a rod from a different metal. A worthy Persian technology, these batteries were perhaps used to power small utilities in the ancient times. The artifacts of these batteries that were found in Mahoze, left discoverers stunned. The scientists actually tried out these ancient batteries. They found that when the jar was filled with electrolytes like vinegar, it produced 1.5 to 2.0 volts. However, it is still not clear what exactly these were used for.

3. Human Rights – Cyrus Cylander – First Universal Charter of Human Rights – 576 B.C.

One of the best Iranian discoveries is the basic rights a human can have in society. You may have heard of the Cyrus Cylinder, known as the world's first reference of human rights. The charter was first discovered in Babylon (recent Iraq) in 1879. After lots of archeological research, they realized it belongs to Cyrus the Great, the Persian Achaemenid King.

He defined his just ideas into a pack of rights and ordered to inscribe them in Akkadian cuneiform script over a clay cylinder in 534 BCE. Amazingly, it's even one and half millennium (1700 years) older than Magna Carta. Nowadays, the cylinder is kept and shown in London's British Museum.

4. Postal Service - Chapar Khaneh

There is credible evidence to believe that first ever postal service of the world began in Persia – today known as Iran. Every Persian Empire inventions list today features this invention. Horse-drawn wagons were deployed to carry mail, mostly for government communication needs. If Greek historian Herodotus were to be believed, the regular postal service began in ancient Iran around the 6th century BC during the rule of King of Achaemenid. History suggests that the postal system back then was quite

swift! And, men on horses toiled long hours to deliver mail without stopping for anything – not even snow, storms, or heat! In erstwhile Persia, mail messengers were called Chapaar and they carried the mails riding on horses. There were relay stations in Persia too.

5. Refrigerator – Yakhchal

While you cannot exactly compare the **Yakhchal** with modern generation refrigerator, this ancient evaporation cooler was one of the many marvelous Persian inventions man has ever seen. Persia is a hot country and summer can be quite harsh. This led to the ancient men in Persia coming up with a rather unique way to store the ice made in winter to be used in summer. Yakhchal – which literally means ice pit was a huge dome shaped structure that had a large subterranean storage space that was insulated. The domes were made from sarooj – a water-resistant mortar containing ash, egg whites, sand, and clay. This could not turn water into ice, but could be used to keep foods cool. These structures were several feet high! As interesting as it sounds, it brings us to the question as to how such massive structures were made hundreds of years back. Well, that is how intelligent the Persians were!

6. Algebra – 800 A.D.

It is hard to find a person who does not go through algebra in his/her school syllabus. However, very few are aware of the fact that it is one of the Persian inventions. It was actually invented by Muhammad Ibn Musa al-Khwarazmi – a mathematician and scholar. He discovered several algebraic methods and they are still relevant. He taught algebra as a distinct science. You will agree that all these Persian inventions not just rank high in utilitarian value, but also are very intellectual. These go to show that the Persian civilization was undoubtedly one of the most advanced civilization in the world. Many of the concepts and inventions the Persians left behind are still valued and studied!

7. Sulfuric Acid – Vitriol and Alcohol

When it comes to Persian inventions, sulfuric acid deserves a special mention. The discoverer of this acid was Abu Bakr Muhammad Ibn Jakatra al-Razi. The man was a mathematician, an astronomer and a geographer at the same time. The discovery of sulfuric acid changed many things back then and even today is an integral part of chemical engineering study. This acid is used extensively in various fields – from commercial, industrial to domestic usage. It can be impossible to build a lot of things without sulfuric acid, making it one of the most important Persian inventions gifted to mankind.

8. Founder Book of Modern Medicine- 980 A.D, created by Avicenna

The first scientific book that was printed in the world, after the invention of the printing machine, was the Cannon of Abu Ali Sina (or Avicena, the Persian Physician-Philosopher). His medical masterpiece was the most popular textbook of Medicine, in European Colleges and Universities, during the Middle Ages and up to the 18th Century A.D.(By the way, the earliest College of Medicine, recorded in the History of Iran was "Gundishapur Medical School", 500 A.D. Also take note that the terms, Medica, Medicine, etc. came from Medes==Medeo-Persian Men). Ibn Sina or Abu Ali Sina is known more commonly in the Western world as Aveccina. He is considered to be one of the most significant physicians, astronomers and thinkers of the Islamic Golden Age (8th-13th centuries). After qualifying as a physician at the young age of 18, he went on to produce his most famous works – 'The Book of Healing', and 'The Canon of Medicine', an encyclopaedia of medicine.

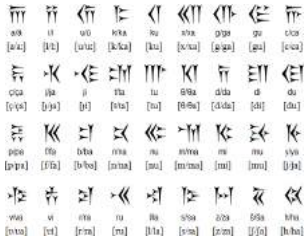
9. First Teaching Hospital – 271 B.C., intellectual centre teaching philosophy , medicine, theology, science.

A hospital and medical training centre also existed at Gundeshapur. The city of Gundeshapur was founded in 271 CE by the Sassanid king Shapur I. It was one of the major cities in Khuzestan province of the Persian empire, in Iran. A large percentage of the population were Syriacs, most of whom were Christians. Under the rule of Khusraw I, refuge was granted to Greek Nestorian Christian philosophers including the scholars of the Persian School of Edessa (Urfa) (also called the Academy of Athens), a Christian theological and medical university. These scholars made their way to Gundeshapur in 529 following the closing of the academy by Emperor Justinian. They were engaged in medical sciences and initiated the first translation projects of medical texts.[22] The arrival of these medical practitioners from Edessa marks the beginning of the hospital and medical centre at Gundeshapur.[23] It included a medical school and hospital (bimaristan), a pharmacology laboratory, a translation house, a library and an observatory.[24] Indian doctors also contributed to the school at Gundeshapur, most notably the medical researcher Mankah. Later after Islamic invasion, the writings of Mankah and of the Indian doctor Susruta were translated into Arabic at Baghdad's House of Wisdom.[25]

10. Anesthesia and Cesarean – 1000 A.D. the earliest file of ceasarean is in the Shah Nameh, Rostam was born this way - Alcohol in Medicine – 864 A.D. , by Rhazès Zakarya

In the 10th century work of Shahnameh, Ferdowsi describes a Caesarean section performed on Rudaba, during which a special wine agent was prepared by a Zoroastrian priest and used to produce unconsciousness for the operation. Although largely mythical in content, the passage illustrates working knowledge of anesthesia in ancient Persia.

11. Alphabet



During the middle of the sixth century BC, the Persian Empire of the Achaemenid dynasty rose to supremacy and spread across Mesopotamia and Afghanistan. The Old Persian language developed during the early history of this dynasty, and it is not a direct offshoot of the Sumerian and Akkadian systems. While the physical appearance of Old Persian symbols is cuneiform (in the shape of wedges), the actual shapes of the signs do not correspond to signs in the older system using similar phonetic values. Some logograms were also part of the Old Persian syllabary, making it something of a misnomer. Old Persian is classified as a syllabic script and is also a very skeletal syllabary with sounds like */pu/* not having independent signs, instead being written using the signs *pa* and *u*. Texts written in this form have been found in Persepolis, Susa, Hamadan, Armenia, Romania, and Kharg Island along the Suez Canal. These inscriptions date back to the period of Darius I and his son Xerxes I. Later on, a more recent form of the language known as pre-Middle Persian was used.

12. Guitar - Tar or Lut – 5000 B.C.

Music is heavenly and even in the ancient days various types of musical instruments were used. According to history, the Persians were very fond of music. One of the many Persian contributions to civilization includes the Guitar – one of the most popular and widely used musical instruments! The Persian type guitar was called Tar. It was made using wooden box and strings. It was invented at a time when musical instruments were quite rare. This is among the top Persian discoveries that was much loved by the monarchs of those days and has influenced Persian music greatly. Gui means three in old persian and Tar means rope, guitar had three ropes at the beginning and changed with time

13. Oldest Ancestor of the Piano – 266 B.C. called tympanon (santur)

The santur was invented and developed in the area of Iran. The santūr for the first time appears in the Moruj al-Zahab, a history book written by Abol Hassan Ali Ibn Hussein Masudi (tenth century). He mentions the santur when talking about Persian music and its various instruments during the Sassanid Empire. Most historians believe that the origin of the santūr is Iran. This instrument with little differences in shape and name is seen throughout the world.

14. Qanat - Water Supply System

Back in the early days of the Persian civilization, a rather well-designed and managed water supply system used to exist. Known by the name qanat, it was an underground channel that was used to carry water from the water well to fields and houses. Its origins can be traced back to the first millennium BC. The tunnels were several kilometers long and were hand dug. There were vertical shafts that served the purpose for ventilation and repair needs.

15. Backgammon – 1400 B.C.

Nard originally called Nardashir is a Persian game, which is played on a backgammon board. The modern backgammon and its variations originated with the Persian Nard. The earliest source to mention the game, Nardashir, by name, is the Babylonian Talmud (Ketubot 61b), in an anonymous statement, which is dated to the latest stratum of the Talmud, 500-600 CE.

16. Polo – 521 B.C., Persian sport Polo game was invented in Persia, some 500 years B.C.

Polo was first played in Persia (Iran) at dates given from the 6th century BC to the 1st century AD. Polo was at first a training game for cavalry units, usually the king's guard or other elite troops. To the warlike tribesmen, who played it with as many as 100 to a side, it was a miniature battle.

In time polo became a Persian national sport played extensively by the nobility. Women as well as men played the game, as indicated by references to the queen and her ladies engaging King Khosrow II Parvīz and his courtiers in the 6th century AD.

17. Chess

Although there is some dispute as to whether the game of chess originated from India or Persia, the earliest mentions of chess in writing can be found within Iranian literature. The oldest surviving chess pieces came from the Persian lands, thus reinforcing the belief that chess originated in Persia. The base of the game may have been invented in India but it was played with dice and by four people, the evolution was made in Iran and was perfected and passed on to the West, through Persia, in 10th century; thus the words Chess (from Shah or King) Shakhmat (Shahmat) Rookh (rokh, or Chariot) etc.

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Arthur Upham Pope

(February 7, 1881 – September 3, 1969)

Arthur Upham Pope was an archaeologist and historian of Persian art. He graduated from Brown University in 1904 and remained on the faculty to teach philosophy. He attended graduate school at Brown, Cornell, and Harvard universities and taught art history at the University of California between 1910 and 1917. In 1923, Pope was appointed director of the San Francisco Museum. Two years later, he went to Iran to complete research and to serve as an art advisor to the Iranian government. He organized an exhibition and the First International Congress on Persian Art in Philadelphia in 1925.

On 4 April 1925, Professor Arthur Pope, the renowned Iranologist, announced that, based on his findings, Iranians were the first nation, who, during the reign of Darius the Great, initiated training in patriotism and taught it in schools to the children and adolescents. In the course of the first 1000 years, the method of teaching this subject was in the shape of plays, so that it got imprinted in the minds of the youth and filled their whole hearts and souls. In the lecture in University of California Prof. Pope had said that Iranians had schools and kindergartens before the Greek; the Greek had established the Academy for teaching science, literature and philosophy to the adults, but Iranians, inspired by the teachings of Zarathushtra, had schools for the 5-years-old onwards, and in these schools patriotism, morale, health and hygiene (sports and hygiene) was given preference to science and literature.
Based on the discoveries of Prof. Pope, in ancient Iran every man who wished to enlist in the army, had to have 3 months military training and 3 months training in patriotism, part of which included learning about the history of Iran and the experiences of their ancestors. Teaching history, in the form of lectures, was compulsory in the course of the military service.

In 1928, he founded the American Institute for Persian Art and Archaeology (later the American Institute for Iranian Art and Archaeology and ultimately the Asia Institute) in New York City. During much of this time, he supported himself by consulting on Persian art acquisitions by museums and private collectors. Beginning in 1938, Pope and his wife, Phyllis Ackerman, edited the multivolume *A Survey of Persian Art, from Prehistoric Times to the Present* (London and New York: Oxford University Press, 1964–1965). The International Association of Iranian Art elected him president in 1960. He and his wife settled in Iran, Iran, where he suffered a heart attack and died in 1969. Mohamad Reza Shah ordered an official funeral for him. His earthly remains were transferred from Shiraz to Isfahan and buried in his chosen place. The building of his Mausoleum started after his death and was completed in 1971.

During his life, for the services rendered to Iran, he was awarded: The Taj Medal and the Medal of Homayoun by the Shah. He also received the Scientific Medal from the Ministry of Education. He received the Honorary Doctorate degree from the University of Tehran. He was appointed as an associate member of the Society for preservation of National Monuments. . He was buried in Isfahan, Iran, where, by the shah's order, a special mausoleum was erected. He was a lover of the Iranian arts and cultures and spent most of his life showing Iran to the World.

Pope's feeling about Iran - "There is not a civilized man in the world whose life has not benefitted in one way or another from the achievements of Persian Culture"

Professor Pope believed that the world owes its greatest industrial developments, in the early stages, to the Persian Civilization!

CHAPTER AND SECTIONS OF IAMA

IAMA- California Chapter 2019 BOD:
President: Omid Ashouri, MD.
Vice President: Faranak MohammadPour, MD
Secretary: Niloofar Niloufar Mohajerani, DDS
Treasurer: Arezou Ashouri, RN

Members at Large:
Hamid Shidban, MD
Mehran Motamed, MD
Susan Morvaridi, PhD

California Chapter Annual Report

1. Participating in Persian community public awareness in UCLA and introduce IAMA and IAMA California chapter

2. Being active in social media to introduce IAMA and IAMA California chapter through radio 670 starting January 2019 about different topics for public awareness

3. Celebrating Noruz with two other medical and dental associations in California; Socal Persian American Medical Association and Iranian American Dental Association

4. Attending in Orange County Chamber of Commerce to collaborate with other organization such as Mom's Against Poverty (MAP) and Seeb Magazine Orange County Health Expo Public Awareness in collaboration with OCIACC, Omid organization and Seeb magazine , having to speakers from IAMA to talk about atrial fibrilation and stroke , free blood glucose and blood pressure screening in addition of free memory test and hearing / visual screening

5. For public. Answering public questions by speakers

IAMA- Illinois Chapter 2019 BOD:
President: Behnam Hajihossainlou, MD
Vice President: Neema Bayran, MD
Secretary: Shafa Soltani, DDS
Treasurer: Asma Zamanian-Rezaei, MD

Members at Large:
Barry Sadegi, MD
Jeri Sadegi
Ahmad Taheri, MD
Mohammad Ranjbari, DDS
Mandana Toosi, Ph.D
Tolou Shokuhfar, Ph.D
Business Advisor:
Shami Sharon Kewarkis, MBA
Legal Advisor: Taher Kameli, JD

Report of IAMA- IL Chapter

September 2019

Presented by: Dr. Behnam Hajihossainlou, MD, and Dr. Neema Bayran, MD,

This Report covers activities from July-September of 2019

Current paid Members: 28 paid members

PAST

1. What has been done?

- Invitation of Dr. Holakouee to Chicago for a PHA seminar and Dinner event

- We have obtained sponsors (3 so far)

- Made several marketing materials such as banners, table runners

- Use of Eventbrite for the FREE public seminar, currently 400 participant

- Creation of flyer and its distribution by all our Board members via our own and IAMA's social media such as Facebook

- We have encouraged all Board members to become familiar with the National and Chapter By-Laws

We thank Dr. Moshirpur for helping us to contact Dr. Holakouee from CA for giving us the honor of being the Guest Speaker at our event

PRESENT

2. What is being done?

- Event Brochure

- Obtain more sponsors

- Using of Eventbrite for the PAID dinner event (capacity 250 guests)

- Creation and distribution of this flyer by all our Board members via our own and IAMA's social media such as Facebook

- Obtaining volunteers for the events

- Increasing membership

FUTURE

3. What will be done by the end of this year?

- Registering our Chapter in the state of IL

- Obtaining Sale's Tax Exemptions

- Planning for the next event

- Submit our monthly reports of activities to the Central Office

- Our goal is to double the number of our paid members from the minimum number of 25 stated in the By-Laws.

- Amend the Chapter By-Laws to include our Chapter, as it currently has only CA, MA, NJ, NY, OH and TX, and also amend our functions and general goals.

IAMA- Massachusetts Chapter 2019 BOD (incumbent):
President: Khosro Farhad, MD
Vice President: Mahta Samizadeh, PharmD-PhD
Secretary: Nahal Panah, MD
Treasurer: Mahnaz Zeinali, PhD

Members at Large:
Reza Madani, MD
Sara Ansari, DPT

March 9th, 2019 at Crowne Plaza Hotel 6-10 PM. Our distinguished speakers:

There are CE credits available for dental professionals by Marotta/BI4ADE

Dental professionals who are interested in obtaining the CE, need to sign in at the entrance and enter a valid email. Please make sure you provide us with the accurate email address. The individuals who fail to enter the correct email address will not receive the CE.

1. Dr. Bahram Ghassemi, Associate Professor of Orthodontics Department at Tufts University School of Dental Medicine talks about the role of orthodontics treatment in correction of malocclusion and facial deformities. Dr. Ghassemi presents cases of malocclusion and facial deformities with the relevant treatment options.

2. Dr. Alireza Hossein Nezhad, Assistant Professor of Medicine at University of Massachusetts Medical School and staff cardiologist at Harrington Hospital talks about cardiac risk factors. He presents the most recent evidence based medicine data on the major risk factors and how to modify them to prevent cardiovascular disease.

There were 2 CE credits for dental professionals. Up to 90 people attended. We had 2 young investigators who presented their work in

posters and won $250 each, sponsored by Dr. Hossein Nezhad and Dr. Shabnam Sani, his wife.

1. Amirali Rahsepar, MD who is a radiology resident at Yale, presented: "How Can Cloud Storage Platforms Help Scientist to Work Even More Efficiently?"

2. Hamed Azami, PhD and post doctoral fellow at Massachusetts General Hospital, Harvard Medical School, presented "Amplitude- and fluctuation-based dispersion entropy for the analysis of resting-state magnetoencephlogram irregularity in MCI and Alzheimer's disease patients"

IAMA- New Jersey Chapter 2019 BOD:

President: Pegah Ameri, DMD
Vice President – Mohammad Sarraf, MD
Treasurer – Golnar Khalili, DMD
Secretary – Anoush Yaminifar, MD
Members-at-Large –
Shiva Ameri, RDH
Ali Tabaroki , MD
Payam Torrei, MD
Advisors –
Massood Khatamee, MD
Shervin Mortazavi, MD
Hossein Ali Shahidi, MD
Social Media – Mrs. Fariba Rassa

New Jersey chapter of IAMA continued the chapter's public awareness sessions on a quarterly basis. Obesity and Weight Management was the topic of discussion in the last event, presented by Dr. Shahidi and with around 50 people in attendance.
The new Board panel of the chapter started their function and held the first board meeting in August.
NJ chapter is honored to host the 2020 Annual conference. Search for the optimal hotel, conference room and Gala ballroom is in progress, updates will be announced soon.

Shervin Mortazavi, MD
President Elect, IAMA National and former NJ Chapter President

IAMA- New York Chapter 2019 BOD:

President: Jasmin Moshirpur, MD

New York Chapter of IAMA

The past year, 2018, was a very sad year in the history of the New York Chapter of IAMA. We lost our distinguished president, Dr. Reza Hedayati. Dr. Hedayati was a very accomplished physician and a superb leader in IAMA's chapter.

The NY Chapter of IAMA had their regular bi-monthly meeting and also their public awareness conference at a convenient restaurant in Queens and Manhattan. At the public awareness sessions we invited guest speakers to address the different topics that were suggested by members or some of the guests. The majority of the topics addressed were about preventable diseases. The conferences were followed by a luncheon and music.

During IAMA's official meeting the main issue for discussion was membership. The need to increase membership was emphasized during this meeting. Young physicians, dentists, nurses and pharmacists were also invited to join our meetings. We encouraged the young attendees to share their ideas. We were very receptive to their needs and we discussed how we could help them to establish and achieve their goals. We also did encourage all senior leaders of this society to remain involved and share their wisdom and ideas with their friends and colleagues.

This society just celebrated their 25th Anniversary during the last yearly Memorial Day meeting. The President of the society stressed the need for the chapter to be more active in expanding their membership and share the goals and future of IAMA with their colleagues.

Jasmin Moshirpur, MD
President of the New York Chapter

IAMA- Ohio Chapter 2019 BOD:

President: Freidoon Ghazi, MD
Secretary: Hossein Motekallem, MD
Treasurer: Homayoun Mesghali, MD

Our activities include medical lectures for the Iranian community and also poetry and music nights .

IAMA- Texas Chapter 2019 BOD:
President: Tannaz Arghamany, MD
Vice President: Dr. Sadeghi
Secretary: Dr. Harandi
Treasurer: Homayoun Ataei, MD

Members At Large:
Shahin Tavackoli, MD
Ehsan Arabzadeh,MD
Homayoun Mohajer, MD

Sections

SUSMA

SUSMA's Board of Directors met three times in 2019. The board unanimously approved help for Iranian Flood Victims. For the past several years, through the Iranian American Foundation in California, SUSMA has supported students that participated in medical or dental schools in the United States. This donation has mainly been allocated to the students that participate in universities in NY.

The future plans for SUSMA continues to be to provide support and help for students seeking residency programs in the United States. We are sensitive to the medical needs of the Iranian community and provide help in any way possible. We encourage joint membership of IAMA and SUSMA to further our common goals.

SIPNA

Power is in assembly

As the President of the Society of Iranian Psychiatrists of North America (SIPNA), an allied Society of American Psychiatric Association (APA), and a subspecialty Medical Society recently added as a new section to IAMA, I would like to thank IAMA for your warm welcome in joining our powers to serve our fellow mankind.

SIPNA is a charitable organization with the goal to promote the science of Psychiatry and services of mental health in Persian speaking population.

Our annual meeting in San Francisco was held in May 20 -21, 2019, Titled: "The science of Mood disorders". The meeting was opened by the review of preclinical data of some promising pharmaceuticals in pipe line for new methods treating depression:
1. "Use of Botox for treatment of depression in adult females".
2. "Utility of a Ketamine like product as a putative antidepressant".
3. "The transformation of physical Blindness to the power of inner vision", an expression through Persian poetry, presented by the blind contemporary Iranian poet Dr. Majid Naifly.

On the day 2 of the meeting, the day started by;

1. Dr. Terrance Ketter, founder and director of the Stanford University mood disorder clinic, discussing: "the differential diagnosis of (Major Depressive Disorder) MDD vs. Bipolar disorder".
2. Our Key note speaker was Dr. Nassir Ghaemi, professor of psychiatry from Tuft's medical school. Titled: "Drugs, Diagnosis, and Despair in the Modern World".
3. Followed by presentation of our prize-winning best research paper Titled: "Search for More Effective Antidepressants". Presented by Dr. Iraj Maany, Clinical Professor of Psychiatry, University of Pennsylvania.
4. Our concluding lecture was titled: "Quest to Discover Inner Emotional Tumult and

Healing in Persian Poetry and Literature", by Danish Forbought, PhD.

Like others, our society has been going through difficult funding challenges. But in despites:

1. we are in the process of modernizing our website, for a better public access to our services.

On our face book page:

2. We have established an active journal club to stimulate clinical discussions.
3. We also have developed a forum for collegial consultation on difficult or complex cases.
4. We have developed and we are always renewing our information pool as a referral source for Persian speaking patients in different states.
5. We are finalizing pharmaceutical grant for the travel award fellowship grant to allow our young physicians to attend our annual meeting which is held during the APA annual meeting.
6. We promote assisting our very talented Iranian physicians in finding residency training position. Our Board of director has pledged to get at least one physician candidate into a residency training program each year.

Our ongoing plans for the coming months are:

1. A CME credited conference in "Addiction" in Los Angeles, which we will be offered as a pre-course during the IAMA California Chapter meeting.
2. An International cultural psychiatry presentation at the APA annual meeting in Philadelphia, April 25-29, 2020. Titling: "State of psychiatric residency training and research in Iran". An introduction to a collaborative effort between American Psychiatric Association and Iran Psychiatric Institute.
3. We have started the process of establishing "Iranian Caucus" in the APA, which will be a permanent representation of the Iranian psychiatrists at the major subspecialty medical organization of the American Psychiatric Association.
4. SIPNA Annual meeting in Philadelphia, April 27-28, 2020. Titling; "Modern Society Under Stress, a Psychodynamic view of current events".
5. Bipolar Disorder mini-fellowship, in Boston, May 29-31, 2020. This is the first comprehensive CME credited mini-fellowship of its kind with a revolutionary view of bringing together two artificially separated fields of Child Psychiatry with the Adult Psychiatry in order to provide an unprecedented understanding of Bipolar Illness. The course is being given by the select group of international frontiers in the Bipolar illness research. This course is highly recommended for those who want to learn the modern view of Mood Disorder Spectrum illness.
6. We are teaming up with number of cultural societies to do public education with goal of removing the stigmata off the psychiatric care through seminars and TV interviews.

At the conclusion as the president of our society. I would like to congratulate many accomplishments IAMA has made since its establishment. As an example of one of many is the establishment of the IAMA medical Center in Kerman. As a newly joined member of IAMA, I would like to urge all of us in serious support of aid relief for the victims of the Flood in Iran who's their painful stories of devastation and their needs of assistance is staggering.

May God Bless our peace-loving people and may God bring our warm hearts closer to each other.

Rahim Shafa, MD
President, SIPNA

Dental

Iranian American Medical Association- Dental Section
First month report

Prepared by: Shafa Amirsoltani, DDS,

This Report covers all activities from September 7th to October 13, 2019

1. What has been done?

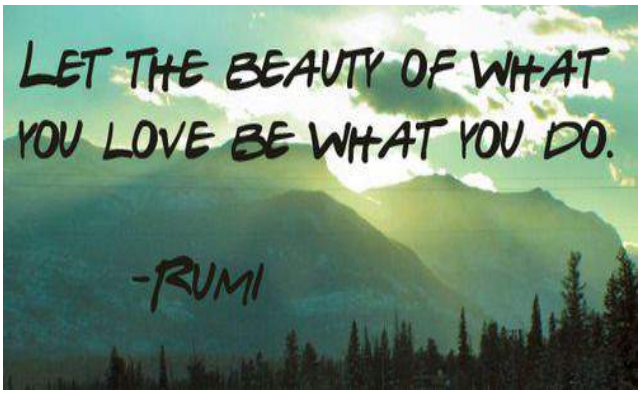
- Introducing IAMA- Dental Section to the Iranian-American communities and Professional Health related communities,
- Arranged a Radio talk show at the Radio 670AM KIRN hosted by Dr. Omid Ashouri in CA on Vaping. This was broadcasted from Los Angeles and accessible through the internet and IAMA website.
- Introduced IAMA- Dental Section to more than 600 audience at the IAMA- IL Chapter's first public event with guest speaker Dr. Farhang Holakouee on October 5, 2019.
- Obtained 2 Dental lab sponsors for the October 5th event
- Creation of Facebook groups for IAMA Dental Section under IAMA- Facebook account with the help of Dr. Katayoun Katouzian
- Published introductory message in both English and Farsi languages.
- Recruited 5 members to the Dental Section
- Currently there are 12 members overall in the Dental Section

2. What will be done by the end of this year?

- Recruit more paid members; Practicing Dentists and Dental Students
- Plan for Dental Section CE activities at the 2020 IAMA Annual Conference, either as currently numbers of speakers and attendees are below the expected level or arrange a parallel conference hall if the numbers are above the expected level.
- Establish the Board of Directors for IAMA-Dental Section
- Recruit volunteers for events and activities.
- Introduce our IAMA- Dental Section to the American Dental Association (ADA), IL- Dental Society and other professional Dental communities and associations.
- Submit quarterly reports of activities to the Central Board.
- My goal is to increase the number of our paid memberships in the Dental Section, recruiting at least 10 additional dentist by our next monthly board meeting in November 2019.

IAMA - Javan Section
2019 BOD:
President: Mohammad Shahbazi, MD
Vice President: Aram Hosseinpour, MD
Secretary: Niloufar Mohajerani, DDS
Treasurer: Aslan Amirian
Members at Large:

- Azin Aine
- Behnaz Darban



Mass Shootings and Psychiatric Disorders: Is there a connection ?

Jamshid A. Marvasti, MD

The news media has written a number of articles regarding the connection between psychiatric medication and gun violence. They have given several cases of mass gun violence where the offender has been on psychiatric medication. Those in the gun industry claim that guns do not make someone become a killer, but rather it is the medication and mental illness that is the cause. In this presentation I explore the clinical and legal aspects of the side effects of medications. I also indicate that although some medications may cause or increase psychotic symptoms such as anger, agitation and aggression, the scientific research to tie medication to violence still produces paradoxical results.

The general public (and occasionally the news media and politicians) may hold a belief that people who commit violent crimes must have a serious mental illness. In examining the research, I found these claims to be unsupported. Instead I explore the possibility that the risk of dangerous behavior is a more reliable factor and one that must be focused on to prevent future gun violence.

In this presentation I also review research studies on medications and side effects of suicide and violence. There are a number of legal cases against drug companies where victims, or offenders claim that the drugs caused the suicidal or aggressive behavior, or led them to commit a crime.

Rules and regulations are made and regulated by the government in the U.S. Patients and medical providers are at a disadvantage in a country where rules are made by politicians who may be heavily influenced by lobbyists who represent drug corporations and the gun industries.

This issue of gun violence is complex and multifaceted, and cannot have a single etiology. In this presentation I aim to explore the various significant factors involved.

How Can Cloud Storage Platforms Help Scientist to Work Even More Efficiently?

Amir Ali Rahsepar, MD, Ahamdreza Ghasemiesfe, Kenichiro Suwa, Greg Marrinan, MD

Yale New Haven Health, Department of Radiology, Bridgeport Hospital, Bridgeport, CT, USA

Background Information/Purpose:

With the exponential growth of data, and the complexity of data management there is a huge need for cloud platforms that can help with data analysis and storage. The old-fashioned physical storage is not very preferred these days secondary to cost and a higher chance of losing data. Cloud storage also provides huge storage space, which can be used for the application of artificial intelligence in medicine. Cloud storages enable us to use very high-end computational power in our researches without the need to have the high-end computers in our offices. The users do not need to worry about running out of storage space. The data can be reached from any device such as cell phones, computers anywhere, and anytime using a simple internet connection. Encryption along with central management of the data makes them much safer than other portable hard disks or flash drives. There are different available cloud platforms such as Microsoft OneDrive, Google Drive, Dropbox, and etc., which offer different features and services to their customers. The purpose of this exhibition is to show how scientists can use these platforms to manage

data and collaborate with their colleagues more efficiently.

Educational Goals/Teaching points:

In this educational exhibit we will try to review the advantages of using cloud storage for scientists. The main cloud storage platforms available in the market and their offering services will be reviewed comprehensively. We will review the differences among these cloud platforms from the medical user's standpoint. In this section, we will discuss important parameters such as safety of storing information in these cloud platforms, cost of using their services, having user-friendly environment, and other services, which may be important for the medical users. We will illustrate how to create and work on documents files such as Word, PowerPoint, and Excel in these cloud storages. Particularly, we will review the sharing options available in these cloud storage services, that enable users to collaborate more efficiently. Then, the restore features will be reviewed, and finally, setting up the mobile app will be discussed.

Conclusion:

In conclusion, in this exhibit, we will try to illustrate how scientists can use cloud storage platforms to store data and collaborate with other colleagues even more efficiently.

Updated Prevalence Rate of Obesity in 2 to 19 Years Old Children in the United States - Preventative Lessons Learned: A Systematic Review.

Ellie Abdi, EdD

Abstract: This systematic review summarized the results of available reduced rate of obesity studied for children 2 to 19 years old in the United States and provided a level of evidence on the effectiveness of interventions. The review was depended on available clinical trials and the health outcomes that were measured. Data on effects of the preventions were processed and carefully accessed to summarize the existing clinical research on the topic.

Introduction:

Considering decades of increased on national obesity rate among 2 to 19 years old, this epidemic has begun to level off and the rise of obesity has slowed over time in the United States. After discussing the obesity on individuals, obesity was looked at a broader level of its significant impacting the larger community such as national security, safety, equity, and academic achievement. America has rated obesity as the top health concern in the country. Therefore this systematic review examined the efforts that the United States has inaugurated to lower the obesity rate by investigating the results of available related studies. In addition this study answered the review question of **What measures have existed to reduce the rate of obesity in 2 to 19 years old children in the United States?**

This study was presented at:

1. 12th Conference of Medical General Practitioners.12E Le Congrès de la Médecine Générale (CMGF)-April 2018, Paris-France

2. Centre Hospitalier Universitaire de Reims. April 2018, Reims, France.

And was published by:

Abdi, E., Taiar, R. (2018). Updated Prevalence Rate of Obesity in 2 to 19 Years Old Children in the United States - Preventative Lessons Learned: A Systematic Review**.** Proceedings of Academics World International Conference 2018. *International Conference on Recent Advances in Medical and Health Science.* P. 6-13 Luxembourg City, Luxembourg.

Listen to the sound of waves within you.
~ Rumi

A Comprehensive Review of Radiography of Patients with Implanted Cardiac Devices and Abandoned Lead

Amir Ali Rahsepar, MD, Kenichiro Suwa, MD, Laleh Golestanirad, PhD, Ryan S. Dolan, MD, Rod S. Passman, MD, Jeremy D. Collins, MD, Greg Marrinan, MD, James C. Carr, MD [1]

Background Information/Purpose:
Millions of patients have cardiovascular implantable electronic device (CIED)s, which comprise pacemakers, implantable cardioverter-defibrillators, and cardiac resynchronization therapy (CRT). To evaluate the physical integrity of CIEDs, chest radiography is the best imaging modality. Thus, all radiologists need to know the normal and abnormal appearances of CIED's leads and generators. The other important point is that after implantation of CIEDs, for variety of reasons the implanted parts may need to be removed. Removal of the leads are not always successful and may result in having retained or abandoned leads. MR imaging of patients with retained leads is challenging due to lack of systematic studies evaluating the safety of MRI in these patients. The aim of this exhibit is to illustrate the application of chest X-ray to know different types of CIEDs and their components better and also review different scenarios that may happen during CIED extraction.
Educational Goals/Teaching points:
In the first main section, we will review the different types of CIED, and their function. Different types of leads including intravenous/epicardial/extra-thoracic leads and their important characteristics will be reviewed as well. In addition, the difference between temporary vs. permanent leads will be explained. Then cardiac anatomic landmarks in chest radiographs will be reviewed, which helps to better understand what type of device/leads have been implanted. In the second main part, we will show the different scenarios that may happen during CIED extraction which may lead to failure in lead extraction. Differences between retained vs abandoned leads will be shown. We will also show the different places for the retained lead fragments. Additionally, safety of MR imaging of patients with retained leads and the important factors related to this such as insulation around the lead, presence of retained lead's fragments in the heart, length of the retained lead will be reviewed.

Key issues:
It is crucial to have the basic knowledge of the normal and abnormal appearance of CIEDs, and the appropriate place of their implantation. Chest radiograph provide very valuable information regarding the integrity of the device, and the possible complications that may happen at the time of implantation. In addition, chest radiograph also provides very important information regarding the retained/abandoned fragments of CIED if the extraction fails. In cases of having retained/abandoned fragments in patient's body and the need for urgent MR imaging the radiologist need to make the call for the best appropriate imaging modality. Here we will review some important parameters that a radiologist should consider when is deciding to choose the best modality.
Conclusion:
In conclusion, we will review how chest radiograph can provide very valuable information regarding the CIEDs, including physical integrity of the device, complications post-implant or post device extraction.

Don't avoid ear itching it might be cancer
Maryam Movassaghian, MD

Introduction: The clinical presentation of oropharyngeal tumors vary depending on the anatomical subsites. We present an uncommon case of tonsil tumor, presenting as ear itching in an elderly male.
Case report: An 84 yo male with PMH of HTN, Type 2 DM, COPD and smoking x70 pack years, presented with chronic right ear itching for 1 year. He reported to have otic pruritus without otalgia or otorrhea and occasional pruritus on right side of neck in past 1 year. No history of fever, cough, ear infections or ear instrumentation. He denied dysphagia but had

odynophagia for one year. On exam auditory canals and TMs were normal bilaterally. Nose, oral cavity, oropharynx, lips, hard and soft palate, tongue and posterior pharynx were normal. But asymmetric enlargement of right tonsil in comparison to left was noted with soft swelling extending into oropharynx, without exudate or ulceration. Poor dentition. No cervical lymphadenopathy. Thyroid was normal.
CT neck w/ contrast revealed largely right submucosal oropharyngeal mass extending to the right soft palate and base of tongue, measuring 2.6x2.5x 4.0 cm, without cervical lymphadenopathy. ENT consult was done and tissue biopsy showed invasive Human Papilloma Virus related oropharyngeal squamous cell carcinoma. The tumor showed diffuse strong staining for P16. Subsequent imaging confirmed stage 1c T2N0M0 P16 positive squamous cell carcinoma of right tonsil. Patient agreed for external beam radiation treatment.

Discussion: Symptoms of oropharyngeal tumor could be related to primary mass effect and growth into neighboring anatomical structures, involving cranial nerves which may cause referred symptoms. Because of insidious and nonspecific presentation of tumor and limited visualization of oropharyngeal mass, early ENT evaluation is warranted to diagnose suspicious mass. HPV16 is becoming more common in oropharyngeal SCC during the last decade after decline in tobacco and ETOH use in Europe and North America. Recent studies showed the upsurge of oropharyngeal SCC associated with HPV in elderly population contrary to the belief that this tumor is common in middle age population. Given the unique challenges related to anatomic location and morbidity associated.

Denovo Use of Once daily Extended release Tacrolimus (Envarsus XR) in Pancreas and Liver transplant recipients: A single Center Experience

Gazi Zibari, Neeraj Singh, Hrishikesh Samant, Bhakti Samant, Robert McMillan, Glen Bernatowicz, Hosein Shokouh-Amiri

Introduction:

A successful organ transplant is life saving and improves quality of life, but requires life-long immunosuppression. Usually patients are taking multiple drugs, multiple times a day. This may lead to non-compliance with their mediation, resulting in acute or chronic loss of organ function. To improve compliance, different techniques have been tried, including reducing frequency of drug intake. Recently calcineurin inhibitors (Envarsus) has been used widely in Europe. We are reporting our limited experience with this once a day dose drug.

Method:

Seven consecutive pancreas transplant and a single liver transplant recipient recently received the once a day dose of Envarsus. All patients were followed as outpatient and compliance, rate of rejection, safety and efficacy of the drug was monitored.

Results:

Since October 2017 we have started using Envarsus for all our pancreas transplant patients. In one liver transplant patient who previously had issues with compliance and maintaining drug level was changed to Envarsus in March 2018. This patient has shown good compliance after starting Envarsus and also maintained good drug levels. No patients have shown any evidence of acute rejection so far. The average start dose was 8mg once a day (range 3-12 mg/day) and average maintenance dose was 7 mg (2-12) per day for pancreas transplant recipients. All patients have been compliant with their medication and no mortality in this limited number of patients has been reported. One patient had to change his immunosuppression to Tacrolimus due to insurance issues. No patients have converted to Tacrolimus because of difficulty of achieving drug level.

Conclusion:

Based on our very limited experience with these few extra renal patients receiving once a day dose of Envarsus, with good compliance and no rejection, we would like to propose the use of this product in liver and pancreas transplant recipients, too.

Safety and Efficacy of a once a day extended release Tacrolimus to improve compliance in organ transplant recipients. *Hosein Shokouh-Amiri, Gazi Zibari, Robert McMillan, Bhakti Samant, Glen Bernatowicz, Neeraj Singh*

Introduction:

A successful organ transplant is life saving and improves quality of life, but requires life-long immunosuppression. Usually patients are taking multiple drugs, multiple times a day. This may lead to non-compliance with their mediation, resulting in acute or chronic loss of organ function. To improve compliance, different techniques have been tried, including reducing frequency of drug intake. Recently calcineurin inhibitors (Envarsus) have been used widely in Europe. We are reporting our limited experience with this once a day dose drug.

Method:

Seventy-four consecutive kidney transplant recipients recently received the once a day dose of this medication. All patients were followed as outpatient and compliance, rate of rejection, safety and efficacy of the drug was monitored.

Results:

Two patients showed acute rejection 2.7%. The average start dose was 9 mg once a day (range 5-10 mg/day) and average maintenance dose was 10 mg (2-27) per day. Only one patient documented to be non-compliant (1.35%). One patient died of causes unrelated to immunosuppression (cardiovascular). Four patients have to change their immunosuppression to tacrolimus due to insurance issues. Three patients converted to Tacrolimus because of difficulty to achieving drug level in spite of high dose of Envarsus, though one of these patients still require very high dose of Tacrolimus too.

Conclusion:

Although we do realize this is a retrospective study with small sample size, we can conclude that once a day dose of Envarsus is safe and effective in preventing rejection while improving compliance.

Primary Uretero-Ureterostomy in Organ transplants *Hosein M. Shokouh-Amiri, Bhakti Samant, Neeraj Singh, Robert McMillan, Donnie F. Aultman, F. T. Siskron IV, Hrishikesh Samant, Gazi B. Zibari*

Background: Ureteral anastomosis (Uretero-Neocystostomy) is considered the "Achilles Heel" of Renal transplant (RT).Few studies of Primary Uretero- Ureterostomy (U-U) in RT have been reported. Primary U-U has an advantage of removing Foley earlier, shorter hospital stay, less incidence of lymphocele & less need for Secondary U-U.

Methods: We are reporting our experience with 103 consecutive patients in whom we used the technique of U-U in RT & compared with 48 RT performed during same time period with Uretero-Neocystostomy(U-N) by another surgeon who preferred to do only U-N. Since May 2016, the data on all RT were collected, including age, sex, type of U-U vs U-N, OR time, duration of Foley in place, length of hospital stay, estimated blood loss, incidence of urine leak & stricture formation, graft & patient survival.

Results: During this time period 151 RT were performed (Cadaveric-96, Living donor-17, Liver-kidney 8, Kidney-Pancreas -30) by 3 surgeons, 2 of whom did U-U for their patients (n=103) & the 3rd surgeon did U-N for all his patients

(n=48). Four patients by the 1st two surgeons did receive U-N either due to ureteral reflux as cause of ESRD or lack of adequate ureter due to previous nephrectomy & ureterectomy. There was no difference in mean age (50.8 vs 46.2), sex (M:F - 46:31 vs 20:16), estimated blood loss (166.7 vs 187.5 ml), duration of Foley in place (6.2 vs 6), length of hospital stay (5.3 vs 5.2), urine leak(1 vs 1), graft survival (97.5 vs 97.2 %) & patient survival (94.8 vs 97.2%) between 2 groups except OR time (2:4 vs 3.1 hrs.) and stricture formation(0% vs 5.5%),

Discussion: Even though this study is not randomized by design, it is essentially randomized, as it was merely by chance of the call schedule that patients received RT by surgeons performing U-U, rather than surgeon performing U-N. Although we are reporting the results in the above 2 groups, when including all our patients who underwent RT, plus either liver or pancreas transplant, too, the result was still the same in incidence of leak, stricture, graft & patient survival. Due to shorter observation time, we do not have reports of secondary U-U in these RT patients; however we believe in the long run 10-14% of RT with U-N will need secondary U-U. We did not remove Foley earlier due to traditional practices but believe it can be removed earlier (post-op day 1) in U-U in contradistinction to U- N, thereby reducing patient's hospital stay.

Conclusion: U-U decreases OR time, Stricture formation & need for secondary U- U in RT patients.

Comprehensive evaluation of macroscopic and microscopic myocardial fibrosis by cardiac MR: intra-individual comparison of gadobutrol versus gadoterate meglumine.

Rahsepar AA, Ghasemiesfe A, Suwa K, Dolan RS, Shehata ML, Korell MJ, Naresh NK, Markl M Collins JD, Carr JC

Department of Radiology, Feinberg School of Medicine, Northwestern University, 737 N. Michigan Ave., Suite 1600, Chicago, IL, 60611, USA.

Purpose: Late gadolinium enhancement cardiac MR (LGE-CMR) and extracellular volume fraction (ECV-CMR) are widely used to evaluate macroscopic and microscopic myocardial fibrosis. Macrocyclic contrast media are increasingly used off-label for myocardial scar assessment, given the superior safety profile of these agents. We aimed to assess the performance of two macrocyclic contrast agents, gadoterate meglumine and gadobutrol, for the evaluation of myocardial scar.

Material and Methods: Forty subjects (61 ± 11 years, 67.5% men) who underwent LGE-CMR using gadobutrol were prospectively recruited for a research CMR scan using same-dose gadoterate meglumine (0.2 mmol/kg) at 1.5 T. Myocardial scar quantification was performed using a short-axis phase-sensitive inversion recovery (PSIR) Turbo-FLASH and steady-state free precession (SSFP) images. Pre- and post-contrast T1-mapping was employed to assess myocardial ECV. An intraclass correlation coefficient (ICC) was used to check for reliability between the two contrast agents.

Results: Using manual thresholding on PSIR Turbo-FLASH images, mean LGE scar percentage (LGE%) was 9.9 ± 9.7% and 9.4 ± 9.7% for gadobutrol and gadoterate meglumine, respectively ($p > 0.05$) (ICC: 0.99, 95% CI: 0.97-0.99). Using the PSIR SSFP technique and manual thresholding, LGE% averaged 7.5 ± 9.0% and 7.1 ± 8.6% for gadobutrol and gadoterate meglumine, respectively ($p > 0.05$) (ICC: 0.99, 95% CI: 0.98-0.99). Average ECV with gadobutrol and gadoterate meglumine were similar at 28.40 ± 4.88 and 28.46 ± 4.73 ($p > 0.05$) with a strong correlation (ICC: 0.98, 95% CI: 0.94-0.99).

Conclusion: We found LGE- and ECV-CMR values derived from gadoterate meglumine comparable to values derived from gadobutrol. Gadoterate meglumine has a comparable performance to gadobutrol in identifying LGE-derived myocardial scar both qualitatively and quantitatively.

Risk of Surgical Site Infection and Mortality Following Lumbar Fusion Surgery in patients with Chronic Steroid Usage and Chronic MRSA infection.

Singla A, et al. Spine (Phila Pa 1976). 2018.

Authors

Singla A[1], Qureshi R[1], Chen DQ[1], Nourbakhsh A[2], Hassanzadeh H[1], Shimer AL[1], Shen FH[1].

Author information

1 Department of Orthopedic Surgery, University of Virginia Health System, Charlottesville, VA 22903.

2 Department of Orthopedic Surgery, University of Missouri, Columbia, MO 65212.

Citation

Spine (Phila Pa 1976). 2018 Sep 17. doi: 10.1097/BRS.0000000000002864. [Epub ahead of print]

Abstract

STUDY DESIGN: Retrospective database analysis among Medicare beneficiaries OBJECTIVE.: To determine the effect of chronic steroid use and chronic Methicillin Resistant Staphylococcus Aureus (MRSA) infection on rates of surgical site infection and mortality in patients 65 years of age and older who were treated with lumbar spine fusion.

SUMMARY OF BACKGROUND DATA:

Systemic immunosuppresssion and infection focus elsewhere in the body are considered risk for surgical site infection (SSI). Chronic steroid use and previous MRSA infection have been associated with increased risk of SSI in some surgical procedures, but their impact on the risk of infection and mortality after lumbar fusion surgery has not been studied in detail.

METHODS:

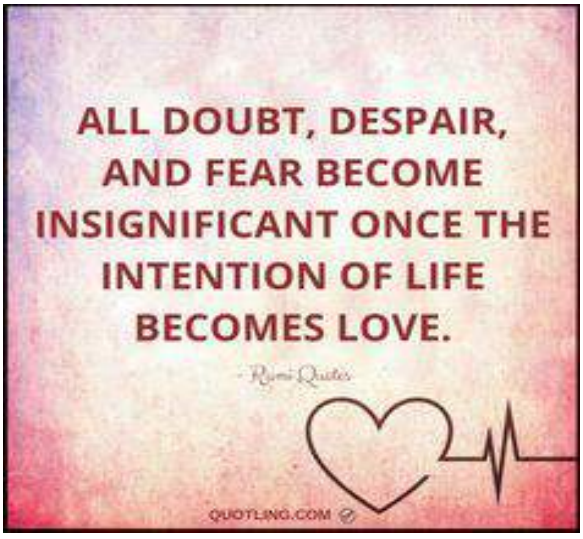
The PearlDiver insurance based database (2005-2012) was queried to identify 360,005patients over 65 years of age who had undergone lumbar spine fusion. Of these patients, those who had been taking oral glucocorticoids chronically and those with a history of chronic MRSA infection were identified. The rates of surgical site infection (SSI) and mortality in these two cohorts were compared to an age- and risk-factor matched control cohort and odds ratio was calculated.

RESULTS:

Chronic oral steroid use was associated with significantly increased risk of 1 year mortality (OR = 2.06, 95%CI 1.13-3.78 p = 0.018) and significantly increased risk of SSI at 90 days (OR = 1.74, 95%CI 1.33-1.92 p < 0.001) and 1 year (OR = 1.88, (95%CI 1.41-2.01 p < 0.001). Chronic MRSA infection was associated with significantly increased risk of SSI at 90 days (OR = 6.99, 995%CI 5.61-9.91 p < 0.001) and 1 year (OR = 24.0, 95%CI 22.20-28.46 p < 0.001) but did not significantly impact mortality.

CONCLUSIONS:

Patients over 65 years of age who are on chronic oral steroids or have a history of chronic MRSA infection are at significantly increased risk of surgical site infection following lumbar spine fusion.



Multispectral Imaging of Enamel Demineralization

N Mohajerani, K Chan, V Yang, D Fried, CL Darling

UCSF School of Dentistry, Department of Preventive and Restorative Dental Sciences

Objective: Most new lesions are found in the pits and fissures of occlusal tooth surfaces. However, conventional techniques, namely dental x-rays, do not provide high sensitivity for detecting early occlusal lesions. Furthermore, studies have shown that visible- and fluorescence-based caries detection systems suffer false positives from staining. Previous work has demonstrated that reflectance imaging at 1450-nm yields high contrast between sound and lesion structure without the interference from staining. However, it is not known whether longer NIR wavelengths demonstrate higher lesion contrast and if lesion severity can be determined from multiple wavelengths. Our objective is to determine which NIR wavelengths for reflectance imaging yields the highest lesion contrast and if its multispectral analysis can infer lesion depth and severity.

Methods: For this study, (n = 25) human molars were collected and sterilized. Acid-resistant varnish was applied over occlusal surfaces excluding a 1.5 x 1.5-mm window. This window was exposed for varying degrees of demineralization: 24, 48, 72, 96, and 120 hours; with a surface softened lesion model at a pH of 4.5. Tooth samples were imaged at selected wavelengths from 405 – 1950-nm. Contrast measurements were calculated using windows of demineralization and sound tissue.

Results: Highest contrast was observed at wavelengths beyond 1460-nm. The contrast was significantly higher ($P < 0.05$) at 1950-nm than other wavelengths. Also, the variation in contrast increases significantly with increasing wavelengths with blue light having the lowest variation and NIR-REF the highest.

Conclusion: This study demonstrates that NIR reflectance at 1950-nm can provide high contrast images of demineralization on tooth surfaces for early detection of occlusal dental lesions, and that contrast ratio increases with lesion depth at 1950-nm.

Support: Delta Dental, and NIH/NIDCR grants RO1-DE19631.

Vasa Previa: A contemporary multicenter retrospective cohort study

Hadi Erfani, MD

Objective

To describe the characteristics and outcomes of patients with antenatal diagnosis of vasa previa and evaluate the predictive factors of resolution in a contemporary large multicenter dataset

Study Design

This was a retrospective multicenter cohort study of all antenatally diagnosed cases of vasa previa between January 2011 and July 2018 in 5 U.S. centers. Records were abstracted to obtain variables at diagnosis, throughout pregnancy, and outcomes, including maternal and neonatal variables. Data were reported as median [IQR] or n (%). Descriptive statistics, receiver operating characteristics and logistic regression analysis were used as appropriate.

Results

One-hundred-thirty-six cases of vasa previa were identified in 5 centers during the study period, 19 (14%) of which resolved spontaneously at median estimated gestational age (EGA) of 27 weeks (23-30). All subjects with unresolved vasa previa underwent cesarean delivery at a median EGA of 34 weeks [34-35] with the median estimated blood loss of 800 mL [700 - 1000]. Rates for vaginal bleeding, preterm labor, premature rupture of membrane, and need for blood product transfusion were not different between the resolved and unresolved group (p=NS). The odds ratio of the resolution in those with the EGA of less than 24 weeks at the time of diagnosis was 8.48 (95%CI 2.34-30.81) before and 10.30 (95% CI 2.18-48.64) after adjustment for confounding variables.

Conclusion

Our data suggest that outcomes in antenatally diagnosed cases of vasa previa are excellent. Furthermore, our data reports higher chance of resolution when the condition is diagnosed before 24 weeks of gestation.

Business of Medicine/Dermatology

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Abstract
Business of Dermatology and Medicine is very complex. Consolidation is becoming a common process in today's medicine businesses. Different specialty practices are joining together to form a larger practice that is more economic and functional for both the physician and the patient. Also, the more considerable portion of the businesses are being acquired by private equity firms that are actively looking for high-profile providers. Interest from the private equity community is vivid in the health care system. Their interests are directed towards the consolidation trend that was already underway in medicine/dermatology resulting in high purchase rate of practices. There are both positive and negative aspects to this process which will be explored further in this paper.
In this presentation, I will be covering different aspects of Business of medicine and dermatology and trying to predict the future of the field.

The Role of Molecular Pathology in Cancer Treatment

Mohammad Shokouh Amiri

With ongoing advances in molecular diagnostics and targeted therapy, more tests are recommended, more tests are ordered, and new guidelines are published so quickly, thus, there is a need for a good and thorough understanding of the Molecular diagnostic methods, results and reports in order for the clinicians for the best treatment plan and outcome.
These test are used exponentially in the lung cancers, breast cancers, colorectal cancers, hematologic cancers, and so on.
In this presentation, I briefly go over the background for Molecular Pathology, the available molecular testing for different mutations, molecular biomarkers for evaluation of different cancers such as EGFR signaling pathway, KRSA, MSI, Her2, and the most recent guidelines on how to tailor specific therapy or treatment plans based on the predictive biomarkers in response to targeted immunotherapy.

What is new with an old disease – Update on endometriosis.

Soheil A-Hanjani MD, FACOG, FACS

Endometriosis is a significant and difficult to treat condition which affects up to 10% of woman in the United States. It is characterized by endometrial-like tissue growth outside of the uterus, directly stimulated by estrogen. It has a variable presentation and clinical course, often presenting with pain (dysmenorrhea, dyspareunia, and non-menstrual pelvic pain) pelvic masses or infertility, or a combination of the above. The condition often poses a formidable challenge in diagnosis and treatment.

Treatment has previously been focused on surgery, analgesia and basic hormone-based medications (Progesterones and combined oral contraceptive pill).

However, some important shifts are occurring in the management of this significant condition:

1. A Shift towards avoidance of surgery, especially multiple surgeries.

2. A shift towards primary clinical diagnosis of endometriosis and away from requiring surgery for diagnosis.
3. Increasing use and duration of use of hypo-estrogenic drugs.
4. The introduction of the first oral Gonadotropin releasing antagonist for the treatment of Endometriosis.

These important changes and their effects on our treatment of women with endometriosis will be discussed.

PEX Mutations Reveal the Function of The Encoded Protein as a Pluripotent Insulinotropic Peptide

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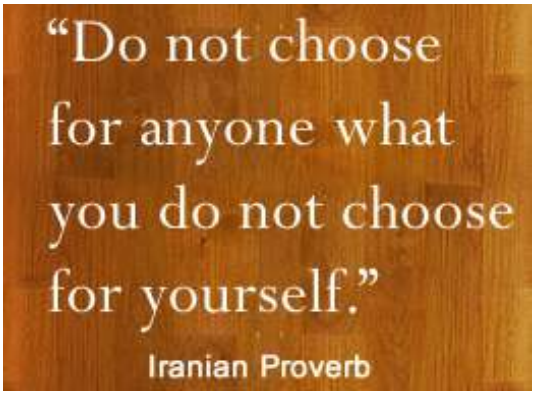
Abstract

Factors that underlie the clustering of metabolic syndrome traits are not fully known. Whole exome analysis in kindreds with extreme phenotypes of early onset atherosclerosis and metabolic syndrome identified novel nonconservative loss of function mutations in the gene that encodes for the pancreatic elastase PEX. Using multi-omics approach we discovered that PEX in the plasma reduces platelet hyperactivation, triggers insulin secretion and degradation, and increases insulin sensitivity. PEX plasma levels rise postprandially and parallel insulin levels in humans. Loss of these functions by the mutant proteins provides insight into disease mechanisms and suggest the protein could be an attractive therapeutic target.



A technique for the salvage of megafistulas allowing immediate dialysis access

Nosratollah Nezakatgoo, MD; Steven D. Kozusko, MD; Jefferson T. Watson, MD; Rebecca Empting, MD; Charles P. Shahan, MD; Michael J. Rohrer, MD

Objective

Almost two million individuals are undergoing renal replacement therapy worldwide, with hemodialysis being the common form. Many factors influence the primary patency of an arteriovenous fistula (AVF), including vessel size, fistula flow rates, cannulation practice, and thrombotic tendencies. Excess dilation of the AVF, resulting in the development of a megafistula, is a complication that can result in a need for AVF revision and subsequent failure.

Methods

The charts of patients who underwent autogenous AVF revision because of the development of a megafistula with aneurysmectomy and vein transposition by a single surgeon during a 7-year period from 2009 through 2016 were reviewed. A technique is described in which after aneurysmorrhaphy, the repaired venous component of the AVF is transposed through a new tunnel while the vein is rotated 90 degrees. This allows the AVF to be accessed immediately, making placement of a tunneled dialysis catheter unnecessary.

Results

There were 102 patients included in the study, with follow-up ranging from 7 to 95 months. In our cohort, 92 of the 102 revised AVFs (90.2%) maintained primary functional patency. Of the 102 patients who underwent this revision technique, there were 10 fistulas that subsequently failed after a mean of 29 months. There were only seven patients who experienced recurrent fistula dilation requiring repeated aneurysmectomy.

Conclusions

We describe a technique for management of the development of a megafistula that uses only autogenous tissue and, perhaps most important,

eliminates the need for temporary dialysis catheter placement.

Chimney-Patch Arterial Graft in Kidney or Pancreas Transplantation for Recipients with Heavily Calcified Iliac Arteries

Nosratollah Nezakatgoo, Leah E. Hendrick, Charles L. Mesh, Jason M. Vanatta, Ryan A. Helmick

ABSTRACT: Iliac artery calcification is a common phenomenon complicating renal transplantation, particularly in those with diabetes. The potential for vascular clamp injury can threaten the renal allograft, ipsilateral lower extremity, or both.

Utilization of internal balloon occlusion can allow for placement of a "Chimney Patch" graft, fashioned from a deceased donor artery, to the calcified vessel, eliminating the risk of clamp injury and minimizing warm ischemic time.

We present a series of 6 patients transplanted with internal balloon occlusion with successful renal and pancreatic allograft function and no ipsilateral vascular complications.

Internal balloon occlusion is a safe and effective adjunct for renal or pancreas transplant to prevent clamp injury with no adverse effect on allograft function.

Using Plantar Electrical Stimulation to Improve Postural Balance and Plantar Sensation Among Patients With Diabetic Peripheral Neuropathy

Mohammad Shahbazi, MD

Abstract Objective: People with diabetic peripheral neuropathy (DPN) often exhibit deteriorations in motor-performance mainly due to lack of plantar-sensation. The study explored effectiveness of plantar electrical-stimulation therapy to enhance motorperformance among people with DPN.

Design and methods: Using a double-blinded model, 28 volunteers with DPN (age: 57.8 ± 10.2 years) were recruited and randomized to either intervention (IG: n = 17) or control (CG: n = 11) group. Both groups received identical plantarstimulation devices for six weeks of daily use at home; however, only the IG devices were set to deliver stimulation. Balance (ankle, hip, and center of mass [COM] sway) and gait (stride velocity [SV], stride time [ST], stride length [SL], and cadence) were measured using validated wearable sensors. Outcomes were assessed at baseline and at six-week. Clinical assessment including vascular as measured by ankle-brachial-index (ABI) and plantar-sensation as quantified by vibratory plantar threshold (VPT) were also measured at baseline and six weeks.

Results: No difference were observed between groups for baseline characteristics (P > .050). Posttherapy, ankle and COM sway with eyes open were significantly improved (P < .05, Cohen's effect size d = 0.67-0.76) in the IG with no noticeable changes in CG. All gait parameters were significantly improved in the IG with highest effect size observed for cadence (d = 1.35, P = .000). Results revealed improvement in VPT (P = .004, d = 1.15) with significant correlation with stride velocity improvement (r = .56, P = .037). ABI was improved in the IG in particulate among those with ABI>1.20 (P = .041, d = 0.99)

Conclusion: This study suggests that daily home use of plantar electrical-stimulation may be a practical means to enhance motor-performance and plantar-sensation in people with DPN

MIcroneedling for Melasma, Scars, and Rejuvenation

Martin Kassir, MD

Microneedling is continuing to grow as an esthetic procedure throughout the world. Needling devices have mushroomed over the past 10 years, with various claims and promises. Dr. Martin Kassir will review 10 years of his clinical results with microneedling and show REALISTIC patient photos for melasma, scars, and rejuvenation. Dr. Kassir will briefly review mechanisms for needling, protocols, intervals, photography, patient consultation and accompanying infusion material and / or

topicals. Recommended for all beginners and those with experience in microneedling.

Should We Continue Legalizing Marijuana?

Aram Hosseinpour, Essen Health Care

Background

Looking at the number of states changing their policies about marijuana and legalizing its medical and recreational use, shows that Marijuana is getting more and more popular and reminds us that a public awareness about its adverse hearth effect as well as its therapeutic benefits is necessary. As a matter of fact, Marijuana is the most commonly used illicit drug in the world[1]. in 2018 almost 6% which is about 1 in 16 of high school seniors in the United States reported that they have been using marijuana (cannabis) every day and the number of 12th graders who recognized marijuana use as a hazardous activity has halved in the last 20 years.[2]

Since marijuana has the potential to impair short-term memory, judgment and perception, it can lower the performance in school or at work and can make driving a dangerous activity. Because it has negative effect on development of brain systems, regular use of Marijuana by teens may have negative effects on their cognitive development and so on their future. Marijuana can also be addictive and may play the role of a gateway for other substances abuse especially for teenagers.[3]

What is Marijuana

Marijuana which also known as weed, herb, pot, grass and bud, is a greenish mixture of the dried flowers and leaves of a plant named Cannabis sativa. It can be smoked in hand-rolled cigarettes (joint), in pipes and water pipes. Marijuana can also be used to brew tea, mixed into foods such as cookies, or candies or be Vaporized. Other forms of marijuana include resins, like hash oil, and shatter that contain higher doses of marijuana's active ingredients and may be used both recreationally and medically. Marijuana contains more than 500 chemicals, but the main psychoactive chemical is delta-9-tetrahydrocannabinol (THC). There is more than 100 compounds that are chemically related to THC, and collectively called cannabinoids.[4]

How Marijuana Effects the Brain

The myth under the effect of Marijuana on our body and specifically on the brain is the similarity of chemical structure of THC (the main psychoactive ingredient of Marijuana) and endogenous cannabinoids like Anandamide which acts as a neurotransmitter in the brain. This similarity allows THC to sit on the receptors of Anandamide affecting the function of the Endocannabinoids systems in different part of brain causing problem in many ways. For instance, THC affects Hippocampus and orbitofrontal cortex, causing impairment of thinking and learning and so problems with school and work. THC also alters cerebellum and basal ganglia, causing impairment of balance, posture, coordination, and reaction time and so problems with driving safely and with playing sports or other physical activities.[5]

Several meta-analyses have shown that Marijuana put the user at higher risk of car crash accident.[6]

The effect of marijuana on brain can be seen shortly after it is consumed, some of them are listed below;[7]

Short-term memory problems
Severe anxiety, including paranoia
Psychosis and Hallucination
Panic
Loss of sense of personal identity
Lowered reaction time
Increased heart rate (risk of heart attack)
Increased risk of stroke
Problems with coordination (impairing safe driving or playing sports)
Sexual problems (for males)

Is it possible for someone to become addicted to marijuana?

Around 1 in 10 marijuana users will become addicted. For people who begin using younger than 18, the number is 1 in 6.1[8]

Some of the signs that show a person might be addicted to marijuana include:[9]

Trying but failing to quit using marijuana.

Giving up important activities with friends and family in favor of using marijuana.
Using marijuana even when it is known that it causes problems at home, school, or work.

Does using of Marijuana lead to use other drugs?
The idea of Marijuana acting as a gateway drug and leads to use other substances is not fully supported by studies and more researches are needed to answer this question. Never the less there are some factors that put everybody at risk of substance abuse; like
1- The history of addiction in the family
2- Mental health issue like depression and anxiety
3- Peer pressure
4- Loneliness and isolation and lack of family support
5- Availability of the drug
6- Socioeconomic status [10]
Long term brain side effect
Animal studies show that marijuana exposure during developmental periods (before birth, soon after birth, or during adolescence) can cause long-term adverse changes in the brain affecting learning and memory tasks later in life.
Some imaging studies suggest that regular use of marijuana in adolescence is associated with structural changes in brain affecting functions such as memory, learning, and impulse control in comparison to people who do not use.
A study in New Zealand indicated that persistent heavy marijuana use started in adolescence was associated with loss of 6 to 8 IQ points and never recovered after quitting marijuana. This loss of IQ was not happened when Marijuana was started in adulthood. This finding suggests that the strongest long-term effect of Marijuana is on teenagers who are still developing new networks and connections between different part of brain.
On the other hand, two recent Studies on twins did not support a causal relationship between marijuana use and IQ loss. Studies about long-term effect of Marijuana on brain have some limitations for example participants usually use multiple substances. So, in order to have a definite conclusion about impact of marijuana on brain development, more prospective studies with large sample of participants are needed, where effect of each substance alone and in combination with other substances will be studied. [11]

Other health effects of marijuana
Generally, we can categorize other health effect of Marijuana into mental effect and physical effect
Physical effect includes lung and heart health effect
Marijuana smoke contains many of toxins and irritants and carcinogenic material as tobacco smoke and similarly It can damage the lung tissue and cause bronchitis with productive cough and predisposes more lung infection in heavy smokers. [12]
Whether or not Marijuana causes lung cancer the same tobacco does is still an unanswered question. The difficulty to answer this question is partly because people smoke Marijuana differently compare to tobacco. For instance, because the effect of Marijuana last longer so people smoke Marijuana less frequently than Tobacco. So more studies and more researches need for this question. [13]
Marijuana increases heart rate, rises blood pressure and decrease the capacity of oxygen transportation by blood. All of these can lead to heart attack. Also, Marijuana may cause orthostatic hypotension that raises the possibility of faint and fall along with its complications. Some studies show an associated between Marijuana and a malignant testicular cancer named nonseminomatous testicular germ cell tumor. [14]

Marijuana and mental Disorder
Some researches have shown a link between Marijuana use and psychosis in individuals with genetic vulnerability. People with specific variant of AKT1 gene (a gene that codes for an enzyme affecting dopamine function in brain) and gene that codes COME, (an enzyme that metabolize dopamine) have more risk of developing psychosis when use daily Marijuana.

Researches has not found any association between marijuana use and depression and anxiety disorders. [15]

Use of Marijuana in medicine

Two drugs that are approved by FDA and named Dronabinol and Nabilone which contain THC (the main component of Marijuana make people ''high''), are used to treat nausea caused by chemotherapy. Also, they are approved to increase appetite in patient with AIDS with significant weigh lost. Epidiolex® is another FDA approved medication containing CBD for the treatment of two pediatric epilepsy, Dravet syndrome and Lennox-Gastaut syndrome. Nabiximols (Sativex®), which is not an FDA-approved medication, is used in the UK, some European countries and Canada to treat muscle control problem in Multiple Sclerosis. All thought there are medications containing THC and CBD approved by FDA, the Medical Marijuana which referred to the whole planet of Marijuana or its extract and used to treat illnesses, never have been approved by FDA so far and larger clinical studies are needed for FDA to approve medical benefit VS health side effect of Marijuana. [16]

Conclusion

Because there is some medical benefit in Marijuana plant there is a growing number of states that are legalizing medical use of Marijuana. So far 33 States plus District of Colombia have legalized medical use of Marijuana and 10 States plus District of Colombia have Legalized recreational use of Marijuana.[17] So, as it was mention earlier more effort should be made to aware people about health hazards of Marijuana and More researches should be done to approve medical benefits of medical marijuana. And we always need to be concerned especially for adolescent population that can be the target of marijuana's side effects specifically side effects that influence their academic performances and we need to think about this question: ''Should we continue legalizing Marijuana?''

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Insecure attachment, information processing biases, and OC in children

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Abstract

Although there is evidence of a significant relationship between parenting style and pediatric OCD, the mechanism through which parenting contributes to the development of OC symptoms in children is unclear. However, recent theoretical developments suggest that styles of parenting that induce attachment insecurity may elevate OC symptoms in children via the mediating influence of attentional and interpretive biases. The aim of this study was to test this hypothesis, by examining the association between attachment insecurity, information processing biases, and the development of the symptoms of obsessive-compulsive disorder in children. 221 female children, aged 10 to 12, were administered the Children's Yale-Brown Obsessive-Compulsive Scale, the Stroop task , an interpretive bias task and the Inventory of Parent and Peer Attachment - Revised Version for Children. Structural equation modeling revealed that the contribution of attachment insecurity to OC symptoms was partially mediated by negative

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attentional and interpretative biases. There also was a direct link between attachment insecurity and OC symptoms in children. The implications of these findings for understanding and preventing pediatric OCD are discussed.

Keywords: Obsessive-Compulsive symptoms, Attachment, attention, interpretation, children

Introduction

Anxiety disorders are primary mental health problems that significantly affect the lives of many children. Obsessive compulsive disorder as a particular relevance to the present research is characterized by the tendency to experience obsessive thoughts that trigger compulsive rituals. Obsessions are recurrent and persistent thoughts, impulses, or images that are experienced as intrusive and that cause marked anxiety or distress. Compulsions are repetitive behaviors or mental acts that the person feels driven to perform in response to an obsession, or according to rules that must be applied rigidly (DSM-IV; American Psychiatric Association, 2000).

In recent years there has been interest in the possibility that OCD, like some other anxiety disorders, may result at least in part from biased patterns of selective information processing (Beck, 1985). Two particular categories of information processing bias that have been implicated in the genesis and maintenance of anxiety dysfunction (cf. Mathews & MacLeod, 2005) are attentional bias, which operates to favor the processing of threatening information (cf. Bar-Haim et al. 2007) and interpretative bias, which favors the imposition of threatening resolutions on ambiguous information (cf. Mathews & MacLeod, 2005).

Two common methods of assessing anxiety-linked attentional bias have become known as the emotional Stroop task (cf. Williams, Mathews, MacLeod, 1996) and the dot probe task (MacLeod, Mathews, & Tata, 1986). The pattern of emotional Stroop effects shown by OCD patients suggests that they selectively attend to the content of threat words related to their obsessions and compulsions (Lavy et al., 1994). For example, Foa, Ilai, McCarthy, Shoyer, and Murdock (1993) administered the emotional Stroop task to OCD patients with washing rituals, OCD patients without washing rituals and non-clinical participants. They found that selective processing of threat information in OCD was highly specific to the patients' particular concerns. Using dot probe task, Tata, Leibowitz, Prunty, Cameron, & Pickering (1996) found that adults with OCD allocate attention towards threatening words related to their OCD concerns. There is now good evidence that attentional preference for threatening information makes a causal contribution to anxiety vulnerability, at least in adults (MacLeod et al., 2002).

Importantly, these patterns of anxiety-linked attentional bias also are observed in children (cf Vasey & MacLeod, 2001). For example, using the dot probe task to assess clinically anxious children, Vasey, Daleiden, Williams and Brown (1995), found that even their youngest anxious patients, aged only nine years, showed a relative speeding to discriminate probes in the vicinity of threatening stimuli. Tagavi, Neshat-Doost, Moradi, Yule and Dalgleish (1999) obtained the same finding when examining clinically anxious eight-year-old children. Rezvan, Bahrami, Abedi, MacLeod, Neshat-Doost, & Ghasemi (2011) demonstrated that OCD children had a higher attentional preference for threatening stimuli relating to OCD concerns than non-clinical children.

Turning next to selective interpretation, there is good evidence that anxious adults also show a heightened tendency to interpret ambiguous information in a threatening manner. Mathews, Richard & Eysenck (1989) developed a method of assessing selective interpretation indirectly, using a recognition memory approach and found that anxious adults do selectively impose negative interpretations on ambiguity. Furthermore, recent research indicates that this interpretive bias makes a causal contribution to anxiety (Grey & Mathews, 2000).

Once again, there is some evidence that anxious children also demonstrate this tendency

to interpret ambiguity in a threatening manner. Bell-Dolan (1995) found that participants with heightened trait anxiety were more likely to report interpreting ambiguous scenarios as hostile. Rezvan et.al (2011) showed that children who display greater evidence of OCD are characterized by an interpretive bias that serves to impose threatening resolutions, pertinent to OCD concerns, on ambiguous information. Therefore, it is plausible that interpretive selectivity may functionally contribute to childhood OCD symptoms.

Although the origin of biased information processing in anxious children has not been conclusively established, one plausible hypothesis is that it may arise as a result of particular types of parenting (Ginsburg & Schlossberg, 2002; Rapee, 2001; Bogels, VanDongen, and Muris, 2003). There has much recent interest in the capacity of attachment relationships (Muris, Mayer, & Meesters, 2000; Warren et al., 1997) to predict the development of anxiety disorders in children. As will now be reviewed, quality of the attachment relationship has proven to have especially high predictive value (Greenberg, 1999).

Attachment and anxiety disorders

Attachment theory was developed to explain the way in which biological dispositions and early childhood experiences exert their influence of later psychological health or psychopathology (Bowlby, 1973). Consistent with the central tenets of attachment theory, a number of studies have demonstrated that insecure attachment is a precursor for anxiety in children (Muris et al, 2000; Warren et al, 1997; Lewis et al, 1984; Shamir-Essakow, et al., 2005). With respect to the relationship between attachment insecurity and OC symptoms, Kyrios et al (2005) have supported the role of ambivalent parenting styles and attachment in OC symptoms. Myhr et al (2004) found that OCD and depressed groups demonstrated greater attachment insecurity than control groups. Doron et al (2009) suggested that both attachment anxiety and attachment avoidance lead to OC symptoms via mediating cognitive beliefs. Ivarsson et al. (2010) showed that insecure attachment has relationship with OCD.

While there is evidence that attachment insecurity predicts the development of anxiety dysfunction in children, the mechanisms through which it exerts its influence are unclear. Bowlby (1973) suggested that interactions with rejecting and unsupportive attachment figures push a child toward attachment strategy which is called internal working models. Such working models are likely to shape how individuals think about themselves and their environment (Rholes & Simpson, 2004). Thus, it is plausible that they will influence which aspects of the environment individuals attend to, and how they resolve the ambiguities they may encounter. This invites the hypothesis that insecure attachment may precipitate the patterns of attentional and interpretive bias, that in turn render children vulnerable to anxiety dysfunction, such as the development of OC symptoms. Although it has been demonstrated that there are significant differences between children with and without OCD in terms of attentional and interpretive biases, it is, however, remains unknown whether insecure attachment predicts OC symptoms in children, due to the mediating influence of attentional bias favouring threat information, and interpretive bias favoring threatening resolutions of ambiguity.

Within the limitation of cross-sectional design, the purpose of the present study was to test this hypothesis, that attachment insecurity affects OC symptoms in children at least partly through the mediating influence of such attentional and interpretive biases. Findings demonstrate that non-clinical population experience similar intrusive thoughts to clinical populations, but with lesser frequency (Rachman & de Silva, 1978) and they engage in compulsive behaviors in order to remove distress (Ladouceur et al., 1995; Muris, Harald, Clavan, 1997). Such results have been replicated in other studies (reviewed in Gibbs, 1996; Doron et al., 2009). It has also been found that the difference between girls and boys in OC symptoms is statistically significant and girls

experience more OC symptoms than boys (Salehi et al, 2004).Therefore, this study has been conducted among sub-clinical schoolgirls.

Fraley & Spieker (2003) indicated that the variation in attachment patterns is largely continuous, not categorical. Regardless of existing controversies around attachment classifications, the matter of importance in this study was not the styles of attachment, but how attachment insecurity relates to information processing biases and OC symptoms in children.

Therefore, three alternative hypothetical models of the relationship between these variables were then tested using structural equation modeling. Model A specified only a direct path from attachment insecurity to OC symptoms. Model B specified only indirect paths from attachment insecurity to OC symptoms via negative attentional and interpretive biases. Model C specified both a direct path from attachment insecurity to OC symptoms, and indirect paths from attachment insecurity to OC symptoms via negative attentional and interpretive biases. These three models are illustrated in Figures 1, 2 and 3.

Method

Participants

Participants in this study were 221 schoolgirls, aged between 10 – 12 years, recruited from four schools in the third district of the city of Isfahan. The district was selected at random, and the four schools were selected on the basis of receiving administrators' permission to conduct the research. In each school, 5 classes were chosen randomly.

Parents were informed about the study, and were asked to fill in the consent form if they permitted their children to take part. When permission was received, the parents completed the parent version of the Children Symptom Inventory (CSI-4; Gadow & Sprafkin, 1998). Participants were excluded if responses on the CSI-4 indicated that the child met diagnostic criteria for any disorder other than OCD (3% of the students).

The children were selected from non-profitable schools in order to be able to work on children who had not intellectual and learning disabilities. All of the children were form Iran/ Isfahan.

According to sample size, Schreiber et al (2006) mentioned that although sample size needed is affected by the normality of the data and estimation method that researchers use, the generally agreed-on value is 10 participants for every free parameter estimated. Although there is little consensus on the recommended sample size for SEM (Sivo et al, 2006), Garver and Mentzer (1999), and Hoelter (1983) proposed a 'critical sample size' of 200. In other words, as a rule of thumb, any number above 200 is understood to provide sufficient statistical power for data analysis.

Questionnaire Instruments

Children's Yale-Brown Obsessive-Compulsive Scale

The Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) is a 10-item semi structured inventory that assesses the severity of OCD symptomatology experienced across a one-week period (Goodman, Prince, Rasmussen, Mazure, Delgado, et al., 1989). The instrument yields two subscale scores, measuring obsessions and compulsions, as well as a total score reflecting overall symptom severity. It has good reliability and validity (Scahill et al., 1997).

The Inventory of Parent and Peer Attachment - Revised Version for Children

The original IPPA (Armsden & Greenberg, 1987) was developed to measure the positive and negative affective and cognitive dimensions of adolescents' relationships with their parents and close friends. Gullone and Robinson (2005) revised the IPPA to enable its use with children and younger adolescents, producing the Inventory of Parent and Peer Attachment - Revised Version for Children (IPPA-R). The full instrument contains two scales, one assessing parental and the other peer attachment. Only the parent attachment scale was employed in

this study. The parent attachment scale assesses three dimensions of attachment: trust, communication and alienation. The IPPA-R has a good reliability and its validity has been demonstrated by its convergence with other related measures (Gullone and Robinson, 2005).

Children Symptom Inventory

The Children Symptom Inventory (CSI-4; Gadow & Sprafkin, 1998) is a screening test that assesses symptoms in children aged 5-12, to determine if DSM-V diagnoses are warranted. The inventory comes in both parent and teacher versions, and the parent version of CSI-4 was used in this study. This instrument has a satisfactory internal consistency reliability (Sprafkin et al. 2002), criterion-related validity and discriminate validity (Mohamad Esmail 2007).

Cognitive Bias Assessment Tasks

Attentional Bias Assessment Task

The emotional Stroop task was employed to assess attentional bias to threatening information (cf. Williams et al. 1996). The task employed the following five categories of words: positive attachment words (e.g. love), negative attachment words (e.g. hate), positive OCD relevant words (e.g. clean), negative OCD relevant words (e.g. garbage), and neutral words (e.g. chair). Since it has been found that the prevalence of OCD symptoms among girls, aged 8 to 18, is predominantly high in the field of contamination (Salehi et al, 2004) OCD related words all were associated with the particular OCD concern of contamination. An initial pool of 150 such words (Neshat Doost, Moradi, Taghavi, Yule, and Dalgleish, 1999; Naziri & Birashk, 2002; Motriz et al, 2004) was rated by 6 judges on relevance to the five categories of interest, and the 60 words employed in the study were chosen on the basis of these ratings.

The emotional Stroop task comprised 240 trials, delivered as 4 blocks of 60 trials each. The participant was required to ignore word meaning, and identify the color as quickly as possible. In keeping with convention, slowing to identify the color of words from a particular category was taken to indicate difficulty ignoring the content of these stimuli, suggesting an attentional bias towards this category of information.

Interpretive Bias Assessment Task

The task used to assess interpretive bias, favoring threatening resolutions of ambiguity, was a variant of the recognition memory procedure developed by Eysenck et al. (1991). The task initially exposed participants to audio recordings of 32 experimental sentences, all of which were ambiguous, mixed together with 18 unambiguous neutral sentences, to make a total of 50 sentences. To encourage self-referential processing, all sentences described events occurring to the second person (e.g. ''you''). The ambiguous sentences that made up the experimental stimuli all could be interpreted to yield either a threatening or non-threatening meaning, and were divided into two equal sized subsets. For one subset, all the negative meanings were related to contamination OCD concerns, while for the other subset all negative meanings were related to attachment insecurity. Each subset comprised of 16 experimental sentences. All stimulus sentences were recorded in a fixed random order on an audio player. On this recording, one sentence was read out every 15s.

For the subsequent recognition memory task, which was conducted after a distractor task, four alternative test versions of each experimental sentence were prepared. These four test sentences all were structurally similar to the original sentences, and began with the same few context-setting words as the original experimental sentence. However, their meanings differed as follows. One of the test sentences had the same meaning as the threat interpretation of the original ambiguous sentence (threat target), while another had a threat meaning unrelated to a potential interpretation of the original sentence (threat

foil). Another test sentence had the same meaning as the neutral interpretation of the original ambiguous sentence (neutral target), while another had a neutral meaning unrelated to a potential interpretation of the original sentence (neutral foil). To ensure that threat targets and foils were equally threatening, while neutral targets and foils were equally non-threatening, four judges rated the emotional tone of the alternative test sentences for pleasantness, using a 5-point scale ranging from unpleasant (1) to pleasant (5).

Procedure

The test session commenced by having the participant complete both the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS), and the parental attachment scale of the Inventory of Parent and Peer Attachment - Revised Version for Children . CY-BOCS is a semi-structured clinician-administered rating tool and usually is completed with both the parent and child. Consequently, in the case of younger children (mostly 10 year-old children) both the mother and child's responses took into account. But, older children (11-12 year old children) were interviewed, individually, and additional input was sought form mothers when needed.

Following administration of these questionnaires, the participant completed the attentional bias assessment task. While performing this emotional Stroop, the participant sat in front of the computer, 18 inches from the screen, in a quiet laboratory. Initially a practice version of the task was given, that presented 12 uncategorized neutral words. The participant was instructed to ignore the word meanings, and to rapidly process the colors of the words, clicking the matching color bar at the bottom of the screen as quickly as possible. Then, the test version of the task was given and finally, the participant completed the interpretive bias assessment task. In the initial phase of this task, the participant listened to the 50 recorded sentences, and was instructed to imagine herself in each situation. After hearing all the sentences, the participant was given a brief distractor task that involved writing the synonyms of presented words. She was then given the recognition memory-task for the original sentences, rating how closely the sentences shown in this final phase corresponded to the meanings of the initially presented sentences. The participant was then thanked, and the test session ended.

Results

Separate indices first were computed to reflect each participant's negative attentional and interpretive biases, using the data from the emotional Stroop task and the recognition memory task, respectively. The attentional bias index, reflecting slowing to identify the colors of threatening words relative to neutral words, was computed by subtracting the participant's mean color identification latency on threat words from her mean color identification latency on neutral words. Thus, the higher the score on this attentional bias index, the greater the apparent attentional bias towards threatening information. The interpretive bias index reflected the degree to which the participant found the threatening test sentence disproportionately more familiar than its foil, compared to the degree to which they found the neutral test sentence more familiar than its foil, as should be the case if she imposed a threatening interpretation on the original ambiguous sentence. To compute this index, a measure of the participant's ability to detect greater familiarity in the target than in the foil tests sentences (d') was independently computed for each valence of test sentence, using the signal detection approach. Then the degree to which the resulting d' value was disproportionately great for the threatening test sentences, relative to d' value for the neutral test sentences, was calculated by subtracting the latter d' from the former d'. The higher the score on the resulting interpretive bias index, the greater the inferred tendency to impose

threatening interpretations on the originally presented ambiguous sentences.

Next, the data were analyzed in Amos 18 to determine if the Mahalanobis distance statistic identified any outlying cases that should be excluded due to their unrepresentativeness of the sample. Using the Mahalanobis distance statistic, five cases were removed from the data set, and this exclusion improved multivariate normality. The remaining 221 cases were employed in the subsequent analyses.

The data distribution for each variable was assessed for skewness and kurtosis, to ensure parametric analysis was appropriate. The skewness and kurtosis values for all variables fell within the acceptable range of ±2 (George & Mallery, 2001). The assumption of multivariate normality also was evaluated, and it was confirmed that the multivariate distribution of the variables showed no significant deviation from normality. The value of Mardia's normalized coefficient was 0.458, which fell within the acceptable range of ±3 (Bentler, 2006). Means, standard deviations, skewness and kurtosis for all measures are shown in Table1. An examination of the correlation matrix and squared multiple correlations revealed no evidence of multicollinearity among variables. The correlations among all the latent and observed variables in the model are shown in Table 2. Finally, before testing our hypotheses, a confirmatory factor analysis was run using AMOS 18 to confirm that the three latent variables trust, communication and alienation adequately measured the supposed single construct of attachment security. As can be seen from Table 3, all the loadings of these latent variables were statistically significant ($p < 0.001$).

With these preliminaries completed, and with our inspection of data providing the necessary reassurances, we moved on to address the primary question that motivated the study, which was to determine which of the three models under consideration represent the best fit for the data. For this purpose, we carried out structural equation modeling analyses using maximum likelihood estimation. We first tested model A, which specified only a direct pathway from attachment insecurity to OCD symptoms. This model provided a poor fit to the data: χ^2 (5, N=221) = 6.43, $p < 0.05$, CFI = 0.974, RMSEA = 0.10 (90%, confidence interval = 0.02 - 0.19), SRMR = 0.033. We next tested model B, which specified only the two indirect pathways from attachment insecurity to OCD symptoms, via negative attentional and interpretive bias. This second model likewise proves not to provide an acceptable fit to the data: χ^2 (7, N=221) = 18.96, $p < 0.05$, CFI = 0.982, RMSEA = 0.088 (90%, confidence interval = 0.04 - 0.14), SRMR = 0.042. Finally, we tested model C, which specified a direct pathway from attachment insecurity to OCD symptoms, together with the two indirect pathways from attachment insecurity to OCD symptoms via attentional and interpretive bias. This final model provided an acceptable fit to the data: χ^2 (6, N=221) = 8.22, $p = 0.273$, CFI = 0.998, RMSEA = 0.034 (90%, confidence interval = 0.00 - 0.09), SRMR = 0.032. The path coefficients for model C are shown in Figure 3.

The outcomes of this structural equation modeling indicate that attachment insecurity impacted directly upon OC symptoms, while also exerting an indirect impact on OC symptoms that was carried by the mediating influence of attentional and interpretive bias. Neither the direct nor the indirect pathway alone was sufficient to adequately account for the observed relationship between attachment insecurity and OCD symptomatology in this sample of children.

To provide a further direct test of our hypothesis that attentional and interpretive biases play a significant mediating role, partially carrying the influence of attachment insecurity to OC symptoms, we executed formal mediational analysis, applying the bootstrapping procedure within Amos recommended by Mackinnon, Lockwood, & Williams (2004). This bootstrapping procedure generated no unused sample and 2000 usable samples. The results of the analysis confirmed that the indirect effect of attachment insecurity on OC symptom , reflecting the mediating role of the attentional and interpretive bias indices, was statistically

significant (-0.420, bias-correlated bootstrapped 95% CI (-0.518, - 0.312), p = 0.00).

Discussion

This study examined the association between attachment insecurity and OC symptoms in a sample of 10 to 12-year-old schoolgirls. We anticipated that insecure attachment would predict OC symptoms, given previous findings consistent with this expectation. For example, Myhr, Sookman, and Pinard (2004), and Doron and Kyrios (2005), found that OCD is associated with insecure attachment in adults, while Sunderland (2005) reported that attachment insecurity is a risk factor in pediatric OCD. The specific purpose of the present study, however, was to determine whether this expected association between attachment insecurity and OC symptoms was mediated by negative attentional and interpretative biases. The findings confirmed our expectation that insecure attachment would predict OC symptoms in children. Furthermore, they lend empirical support to our hypothesis that insecure attachment influences the development of OC symptoms via mediational role of negative attentional and interpretive biases. Our findings, also, reveal that attachment insecurity exerts a more direct influence on OC symptoms in children that is not mediated by biased patterns of attentional or interpretive selectivity.

The finding that attentional and interpretive biases partially mediate the association between insecure attachment and OC symptoms is consistent with Rapee's (2001) model of anxiety. This model proposes that the impact of environmental factors, such as parental interaction, on the development of anxiety in children, is mediated by information processing biases. The present results also are compatible with findings obtained by Doron et al. (2009), when studying adults. Using a cross-sectional design, these researchers demonstrated that the association between attachment insecurity and OC symptoms was mediated by OCD-related dysfunctional beliefs. These dysfunctional beliefs may represent the consequences or correlates of negative biases in lower cognitive operations, such as attention and interpretation.

Our observation that insecure attachment can exert a relatively direct impact on OC symptoms sits comfortably with the wealth of evidence indicating that attachment insecurity is closely associated with such symptomatology. Ehiobuche (1988) demonstrated that students with high obsessionality scores had parents who were more rejecting, more overprotective, and less emotionally warm, than the parents of students with low obsessionality scores. Yoshida, Tage and Fukui (2001) observed that the perception of parental protectiveness and interference was significantly higher in individual with OCD than in non-anxious controls. Turgeon, O'Connor, Marchand, and Freeston (2002) also found parental protectiveness to be disproportionately common in the families of children with OCD. Such finding has led researchers to view insecure attachment as a factor that might contribute quite directly to OCD (Myhr et. al, 2004), and our own findings support the existence of such a direct pathway from insecure attachment to OC symptoms.

But how might this direct pathway operate? It is plausible that the direct pathway involves minimal cognitive activity, with the obsessive-compulsive response to attachment insecurity instead representing the type of readily accessible, overlearned responses to well-recognized situations that often come to govern behavioral reactions to unchanging situations (Ellis, Thomas, & Rodriguez, 1984; Kihlstrorm, 1981). The mere presence of attachment insecurity may be sufficient to directly elicit OC symptoms, without the need to posit any intervening cognitive mediator. Some situations are so familiar and consistent that when their features are present in the environment, this is sufficient to evoke a stereotypical pattern of behavioral response (Bargh, Chen, & Burrows, 1996). Perhaps this becomes the case when children find themselves repeatedly encountering situations in which they experience insecure attachment

to their parents, leading them to react to such insecure attachment situations by invoking rituals. Such ritualistic behavior may be a direct and automatic response to the attachment insecurity, reinforced because the children's feeling that they are unsafe is negated by ritualistic, or similar controlling behaviors, which make their world, seem safer (Sunderland, 2005, Guidano and Liotti, 1983).

Our data, also, show that attachment insecurity affects OC symptoms indirectly, via such patterns of biased processing selectivity. We already know from previous research that such processing selectivity can exacerbate anxiety symptoms, as both attentional bias and interpretive bias have been shown to make a direct causal contribution to anxiety (MacLeod et al., 2002; Grey & Mathews, 2000). But how might attachment insecurity give rise to negative attentional and interpretive bias? One possibility is that such cognitive biases develop as a secondary consequence of the increased exposure to negative emotion that accompanies attachment insecurity. Field (2004) has found that negative environmental experiences can contribute to the development of information processing biases in children. Rosen and Schulkin (1998) proposed that, if individuals are exposed to repeated and ongoing stress, then fear circuits become increasingly easily activated, or come to be maintained in a hyper-excitable state, which increases vigilance for threat.

Another possibility is that these selective processing biases may be shaped by the parenting styles associated with attachment insecurity. For example, Chorpita, Albabo, and Barlow (1996) showed that parental models can influence the way in which children interpret social situations. Similarly, Bogels, Van Dongen, and Muris (2003) argue that parents can model patterns of interpretation, which are then transmitted to their children through observational learning. These researchers found that children's negative interpretations were associated with parents' negative interpretations. If children encounter inconsistent responsiveness in others, they may become more inclined to interpret ambiguous situations as threatening (Barrett, Rapee, Dadds, and Ryan, 1996).

While these ideas are necessarily speculative, we hope that they may serve to guide future research in this field. Such future research could benefit from the inclusion of additional variables, such as depression, to create a more comprehensive model of the association between attachment insecurity and OC symptoms. It also may be informative to consider a broader range of parental characteristics, for example by taking account of attachment insecurity in the parents, and of parental psychopathology. The inclusion of both male and female children and parents also would be desirable, to enable comparison of sexes and to permit greater generalization of the findings.

Because of the prevalence of contamination concerns among schoolgirls who have OC symptoms, CY-BOCS scores calculated only for contamination-based obsessions and compulsions. Other fields of OCD symptoms may be considered in the future studies. Given that all the measures in this study were administered in the same order for all subjects, creating changing in the ordering of administrating instruments may influence on the outcomes. This study was a cross-sectional design and therefore we suggest that the use of longitudinal approaches could prove valuable in helping to determine whether attachment insecurity temporally precedes and predicts the development of attentional and interpretive biases, which in turn precede and predict the development of OC symptoms. Even stronger tests of the hypothesized causal relationship between these variables could be provided by studies designed to directly manipulate them.

For the moment, our results indicate that attachment insecurity presents with OC symptoms in children, and reveal that this reflects both a direct association between these variables, and an indirect association mediated by attentional and interpretive bias. In addition to increasing understanding of the parenting and information processing factors that

underpin childhood OCD, we hope these findings also may contribute to the development of new therapeutic techniques capable of preventing, or remediating, pediatric OCD.

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Role of Hypnosis in Stress Management

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I would like to start with a brief overview of Hypnosis as many people have a misconception and false beliefs about Hypnosis, these ideas are usually originated or influenced by shows, movies or stage magicians who use Hypnosis as an entertainment feature or to demonstrate their power to control another persons mind, while at the other end of the spectrum, Hypnosis is a precious modality in pain management, treating Psychosomatic disorders, management of stress and anxiety, and changing habits.

Let's start with a definition of Hypnosis,
The term Hypnosis refers to HYPNOS, the Greek God of sleep.

Over its history Hypnosis has been defined in many different and often controversial ways, but a simple definition of Hypnosis is:
A special state of consciousness in which certain mental capabilities are heightened while others fade into a subconscious background.
That's why Hypnosis is referred to as empowering the mind, not that Hypnosis can infuse more power into your mind, but it can actually let you get the most out of your own mental power. This mental power can be used in alleviating Psychological distress, inhibiting pain perception, suppressing unwanted desires or extracting memories from subconscious level.
It's generally accepted that "all Hypnosis is self-Hypnosis" and the Hypnotist is simply a guide who leads you thru or shows you the ropes how to enhance your mental power and how to gain control over your desires, your feelings, your emotions and your habits.

History of Hypnosis goes back to ancient Greece when priests or so called Demigods offered miraculous cure in their Aesculapian temples by inducing a trance-like sleep, but the creation of a distinct concept of Hypnosis owes its existence mostly to an Austrian Physician in the 18th century by the name of Frank Mesmer.

Mesmer had a deep interest in Astrology, also, a strong belief in influence of super naturals or so-called Heavenly bodies on human health. He initially used Gravitation and magnetism to describe his healing work, but later he became to believe that it was not the physical forces thru the magnet, but it was he himself producing the cure. Subsequently, he modified his initial theory.
His followers developed 3 different variations of his hypothesis: the Spiritual, Religious and Scientific versions of Magnetism.

Dr. James Braid coined the term HYPNOSIS in 1843.
Dr. Braid and later Dr. Esdaile reported the successful use of Hypnotic sleep with hundreds of surgeries. In explanation, they suggested a neural inhibition induced by Hypnosis. This theory was not scientifically accepted until several years later when Ivan Pavlov greatly expanded the Neural Inhibition Theory in his concept of Physiology of Sleep.
With the advent of Chloroform, Hypnotic anesthesia lost its attraction until the late 19th century when Psychiatry became interested in Hypnosis.

Sigmund Freud and later, Morton Prince began using Hypnosis in treatment of patients with Personality and Anxiety disorders.
Scientific research on Hypnosis started in 1920's by Clark Hall and hid student, Eric Erickson.

Dr. Erickson made an important contribution to the physiology and the inner process operating in hypnosis, and today, his name is most closely associated with Clinical Hypnosis.

As I mentioned earlier, Hypnosis can be used in a variety of mental and behavioral disorders, but the focus of this talk is: Role of Hypnosis in Stress Management. Can lead to health problems. What is stress? And how to define it? There are different definitions of stress, whether its defined by a Psychiatrist, a Behavioral therapist, a Management Consultant, or a Clinician. But the most commonly accepted definition of stress is:
Stress is a condition or feeling, experienced when an individual perceives that demand exceed the accessible personal and social resources.
And a simple practical definition of stress is:
An uncomfortable gap between how we like the situation to be and how it actually is.

Stress can release powerful neurochemicals and hormones that prepare us for action, if we don't take action, the stress response can
Many of the usual ways of dealing with stress such as medications, Alcohol, smoking and eating, can actually be counterproductive and make us more reactive to further stress.
But stress is not always associated with a negative outcome, some degree of stress and anxiety is helpful, it can produce Positive

Adaptive Behavior, many of us have experienced a better performance under pressure of deadlines, because the resulting anxiety motivates us.
But if the stressor is beyond our tolerance, it can result in serious problems.

-According to American Academy of Family Physicians, 85% of all physical illnesses are stress-related.
- A study conducted by Metropolitan Life Insurance Company showed that average of one Million workers are absent on any given day, due to stress disorders.

-In another study by Donatelle and Hawkins, job-related stress, or so-called occupational stress estimated to cost businesses over 150 Billion dollars per year. Note worthy that declined performance caused by stress was not considered, only absence from work.
-Stress-related disability cases have doubled in the last 10 years.

The conclusion is: aside from being a health threat, stress can have a major socio-economic impact too.

How does it manifest?
The common manifestations of stress are, but not limited to:

Possibility of organic disorders, substance abuse and medication side-effect has to be ruled out, prior to attributing these symptoms to stress, therefore, a comprehensive assessment of the patient is always necessary.

Different modalities can be used in stress management:
Progressive Muscular Relaxation, Biofeedback, Cognitive therapy/Reconstructing techniques, Hypnosis, Floatation or REST: Restricted Environmental Stimulation Technique, and recently, Virtual therapy have been shown to be effective in alleviating psycho-physiological symptoms of stress.

Combination of two techniques can be used in stress management as well. For example, Hypnosis along with Cognitive therapy, contrary to what was believed in the past, they are not mutually exclusive, actually, in conjunction, they create a very powerful tool in stress management, as Cognitive therapy targets conscious mind, while Hypnosis works at subconscious level.

During a session of Hypnosis, the subject goes thru a sequence of stages, these stages can be slightly different based on the technique used for Hypnosis but it essentially starts with: Progressive Relaxation, then goes to Deepening, Induction, Testing and the Trance.
During the Trance, the subconscious mind is focused and magnified, the mind is open and receptive, at this time positive suggestions can be used to make desired changes in the mind.

For a session of Hypnosis, you do not necessarily need a Hypnotist, instead, you can use a technique known as self-Hypnosis.
For a self-Hypnosis experience, you need to:

- Sit or lie down in a quiet and comfortable place
- Close your eyes and deeply relax your muscles
- Become aware of your breathing, each time you exhale, repeat the word RELAX silently
- If distracting thoughts enter your mind, simply ignore and brush them aside
- Do not evaluate your performance during Self-Hypnosis
- After 15-20 minutes open your eyes, gently move your body and think how powerful your mind is after a deep mental relaxation.

And yes, there is a possibility of adverse outcome with Hypnosis, as you might have assumed. If the question is whether Hypnosis can be dangerous, the answer is no, Hypnosis by itself is not dangerous, if it were, we would all be in jeopardy every time we got engrossed or absorbed in a good novel or movie. But unwise

use of suggestions may create the opposite of the desired result.

This brings us to some areas of concern in Hypnosis:

1- Aversion suggestion, generally speaking, aversion suggestion and any kind of negative suggestions should be avoided during a Hypnotic session. Although negative suggestion has its own specific indications, it's generally accepted that suggestions must be kept positive. Let me clarify this with some examples:

I Hypnotize someone for the purpose of weight control, under Hypnosis I create a mental image of the person who has become extremely obese, unable to function, barely able to move, this mental image has such a strong impact on the mind that the person develops a pathological fear from food, refuses to eat even the required meals.

Another example is I Hypnotize someone for smoking cessation, under Hypnosis I create a mental image of the person with Lung Cancer caused by smoking, the cancer is in terminal stage, no chance of recovery. After Hypnosis this person becomes to believe that he has a lung cancer already, goes thru extensive testing and evaluation, but all the negative workup and reassurance doesn't help and he believes that he has a lung cancer but the tumor is still too small to be detectable.

If these clinical scenarios happen, they can be very disturbing but not a disaster, in most cases one or two more sessions of Hypnosis can easily reverse the suggestion.

2- Regression and false memories, aside from the limited indications for regression therapy, this is another area to be avoided during Hypnosis. A competent Hypnotherapist should know the difference between Guiding and Leading questions and avoid creating false memories that can affect the person's subconscious or self-image.

3- Pain management: pain is usually a warning symptom, an alarm, therefore, suppressing the pain without discovering the cause can lead to a delayed diagnosis and treatment.

4- Anti-social behavior: no legitimate Hypnotherapist would even consider using Hypnosis to deceive someone or to induce inappropriate or illegal behavior, but in hands of an unethical person, there is a potential of abuse.

5- Forensic Hypnosis: this is a very interesting subject, particularly for people with background in law enforcement. Can we Hypnotize criminal suspects and have them confess under Hypnosis? If so, is this confession a solid document in legal proceedings? Well, it depends where you are. Russia is the first country to formally and routinely use Hypnosis in criminal investigations. In the US, Neveda is the only state that accepts Hypnotically obtained statements as evidence for judgment, again, evidence not document. States of Oregon, Texas, Indiana and California have Hypnotic investigation act. And finally:

6- Dependence, we frequently encounter this problem in stress management. After a session of Hypnosis, the person experiences the benefit of relaxation in reducing stress and anxiety, but unfortunately, the results don't last forever. After a few days to a couple of weeks, they feel a rebound, come back for another session, this can happen again and again until the person feels totally dependent to Hypnosis and believe they will be devastated in a nervous breakdown without Hypnosis, and that's when self-Hypnosis comes to the rescue. Explaining to them that the Hypnotist is simply a guide who facilitates the mental relaxation and relief, and teaching them the self-Hypnosis techniques is successful in more than 95% of cases.

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