



BULLETIN

Vol. 24, No. 40

Summer 2018



1993 – 2018

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**Iranian
American
Medical
Association**

IAMA Bulletin

Summer 2018 ~ Vol. 24, No. 40

A PUBLICATION OF THE IRANIAN AMERICAN MEDICAL ASSOCIATION

PO Box 8218 ~ Haledon, New Jersey 07538-0218

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1. Please type or write legibly.
2. The social and scientific views of the authors are not necessarily IAMA's views.
3. The IAMA Bulletin has the right to edit and/or shorten submitted articles.
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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Note from the Editor



A new bulletin in a new year!

This one is a reminder of what we have accomplished during the last period and we are able to do in the future. You notice the wonderful events of scientific meetings with infusion of great Iranian brains, you will see IAMA clinic shaped as a marvelous building in the city of BAM adding to this association's legacy.

All of this reveals the power of OUR unity and friendship as people who originated from the same land. We do not recognize politics, we only have to hold each other's hand and lead forward to a new dimension in our lives. We are pivotal to our environment medical movements.

We also have to continue to establish a strong foundation of our group in any way we can -- create different committees, create an extension or a branch in every state and city which is possible, and even edit bylaws if it is needed. All of these to be passed to future generations.

I am sure the next bulletin will be a witness to these changes. If I can speak for all, I also like to take this opportunity to extend our gratitude to Dr. Ganchi, whose endless effort since creation of IAMA, a quarter of a century ago, has been the main source of cohesiveness of our membership.

Hope for everyone's good health and success.

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

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President's Message

President's Message:

Dear members and friends of IAMA

We finished our 25th Scientific & Cultural meeting of IAMA at Hilton Post Oaks Hotel in Houston, TX during Memorial Day weekend.

First of all, I want to thank the local organizing committee chaired by Dr. Shahin Tavackoli for their hard work to make a memorable meeting for the 25th anniversary of IAMA.

The meeting was well attended. For the scientific session we had 81 attendees, 39 of them applied for CME credit hours and should already have received their certificates. If anyone has not received their certificate or has not yet applied for it, you can still get the blank form from the IAMA secretary. Provided they fully have registered for the course they should be eligible for it.

The scientific session ran on Saturday and Sunday and different topics were covered and attendees were entitled to 12 hours of CME credits. We had high caliber speakers & participation from the younger generation (students, residents, research and clinical fellows) was excellent. The 2 best presentations from this group received The Leila Armin certificates of best scientific

presentation and \$500 in cash. This is a yearly event in honor of Leila Armin.

The two winners were Dr. Niloufar Mohajerani and Dr. Amir Shamshiraz.

Through the generosity and donations of SUSMA in honor of a world renowned Iranian ophthalmologist (Dr. Ali Asghar Khodadoost) and 4 other established members who recently passed away, Dr. Houshang Mirlohi, Dr. Amir Hedayati and Dr. **Reza**

Moazen zadeh and Mrs. Mahin Khatamee we were able to award altogether 6 travel grants given to young members of IAMA who have been active members in IAMA affairs: Dr. Sara Arian, Dr. Hadi Erfani, Dr. Hassan Aliakbarian, Dr. Keyvan Heshmati, Dr. Omid Yazdanpanah and **Mr. Arman Nejad-Raesian**.

The grants cover the hotel, Gala and meeting registration expenses of these young investigators. In order to get the most out of scientific meeting and have an excellent opportunity in networking. The sessions were very interactive and attendees had ample time to question the presenters.

In the cultural event, Dr. Homayoun Mohajer who is a scholar in philosophy & Persian literature gave an hour of inspiring and moving talk on Rumi, the world renowned Iranian philosopher on religion of love. He was followed by Ms. Mariam



Kazemi from Kimia Academy, who gave a brief talk on the introduction to Persian cultural and literature which was very well received by the audience.

During both days our exhibition hall was open to our attendees and this year, our wonderful sponsors supported IAMA and contributed significantly to the success of our meeting. We appreciate all of our wonderful sponsors.

The Saturday luncheon which was a non CME activity was open to all participants and was sponsored by Dr. Aflatooni, who introduced his company to the IAMA members. There will be a collaboration between his company and IAMA. This company will donate for whomever registers with his company (which is a free enrollment) \$50 to IAMA on a yearly basis.

The Persian evening in Garson restaurant was attended by large numbers of participants together with a few local guests and everybody had a good time there. The Gala as usual was one of the highlights of the meeting and was enjoyed by the great majority of participants. There were altogether 148 attendees and local guests and we altogether celebrated the 25th anniversary of IAMA. The founder, Dr. Ganchi was honored during the Gala gathering, which lasted until midnight with lots of dancing, networking and fundraising for IAMA.

Monday morning's board meeting was productive with many discussions regarding the timing of the meeting. Many members

suggested to change the meeting time. We submitted a survey to all the members who have paid their membership in year 2016, 2017 and 2018 asking to vote for their preferred time for the meeting between Martin Luther King weekend, Labor Day weekend, and Memorial Day weekend. 25 members voted, 10 people voted for Memorial Day, 7 for Labor Day, 6 for MLK and 2 members voted for non-holiday weekend, so Memorial Day weekend was chosen for future meeting. Chicago, between Washington, Chicago and New Jersey, was chosen for the 26th annual meeting and local organizing committee chaired by Dr. Mohammad Shokouh-Amiri have already started securing the venue for our meeting so we can have another successful meeting in 2019.

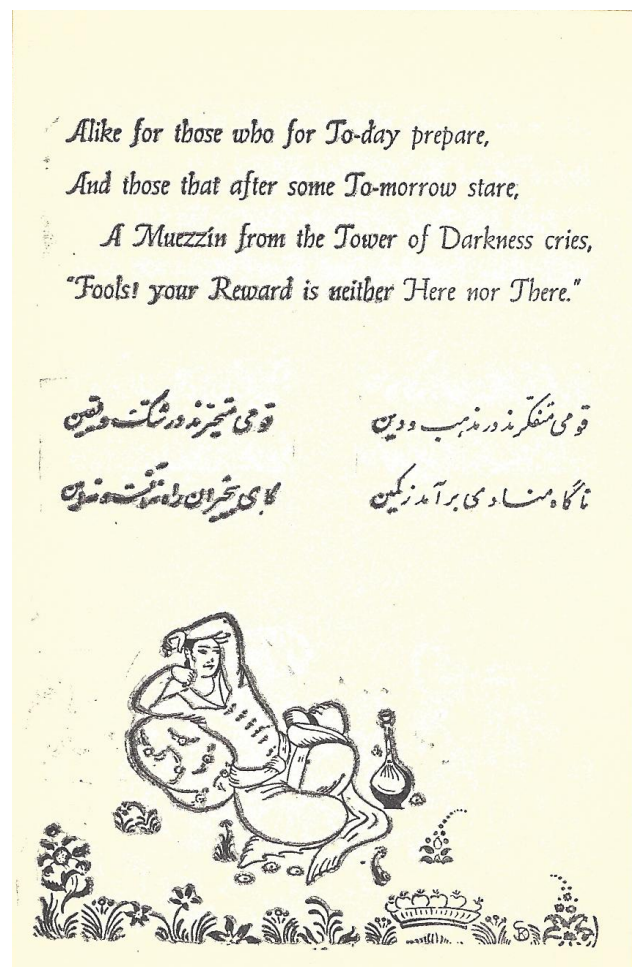
The board of trustees announced their decision to reinstate the current board of directors, I humbly accepted it. I sincerely appreciate the trust placed in me and ask all the board members to continue their roles with me to carry on the mission of IAMA. Dr. Ataei, due to his busy work has declined the offer and Ms. Arezo Ashuri gracefully accepted to be our next treasurer. I want to thank Dr. Ataei for all of his hard work as an excellent treasurer and welcome Ms. Ashuri to the board. Dr. Armaghani also decided to leave the website committee and accepted to become member at large. Dr. Torrei, our corresponding secretary will work as president's advisor as well as Dr. Ataei. Dr. Massumi has graciously accepted to be the corresponding secretary instead.

Dr. Mohammad Shokouh-Amiri will remain as recording secretary & will function as the new website committee chair together with Dr. Katayoun Shokouh-Amiri, Dr. Sina Madani and Dr. Shahriar Bozorgzad. Dr. Ganchi has also volunteered to be with the website committee as well.

I am relying on our new committee and board members to further the goal of IAMA. I hope the new website committee will take us to another level as our website is a dynamic platform since technology is improving rapidly, hopefully our website will improve too. Please have patience & tolerance with us & your constructive advice and criticism is always welcome and appreciated. Please get yourselves ready with your abstracts and participation for the next meeting in 2019.

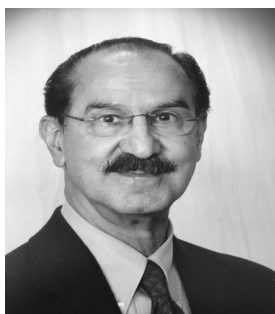
Soon you will hear from IAMA CME committee and local organizing committee regarding calls for abstracts and details of the upcoming meeting.

Sincerely,
Hosein Shokouh-Amiri, MD
President
08/27/2018



Be In IAMA with IAMA

IAMA would like to thank you for your continuous support during the past 25 years of its existence. If it was not because of you, IAMA would not be alive and well today. IAMA has achieved many accomplishments since its inception both here & in Iran in the past 25 years. Here are a few



examples of these achievements. In Iran 1- IAMA Medical Center in Bam, Iran, is operational, offering free medical, dental, counseling services to the needy people in the area and a very sophisticated water & food lab to benefit three neighboring states. 2- Establishment of IAMA Iran consists of the Boards of Directors & Trustees with membership of the prominent Iranians in the field of medicine and engineering. 3- IAMA NGO (Non Governmental Organization) established in Iran too. This was a very difficult and lengthy process, which was followed & become reality by the administration of IAMA in Iran, especially Dr. A. Magsoudi and Dr. A. Esmaeili. Finally after a long period of time & hard work of Drs. Ali Magsoudi and A. Esmaeili the deed of the land & building was issued under the name of IAMA.

Here in US, 1- Twenty-five continuous Annual Meetings in different cities in US with approved CME category one credit. 2- Establishment of chapters in different States of the US to give more autonomy to the local administration. 3- Establishment of the sections like Javaan, Susma, Dental, allied groups and just recently section of Psychiatry (SIPNA) & related groups. 4- A

while ago the ECFMG office decided to ban the young Iranians in the field of medicine from taking the examination due to the sanctions on Iran. IAMA wrote a very strong letter to ECFMG administration and defended the right of our young generation participating in the exam. The decision was

reversed in less than 24 hours. 5- Another important achievement here was getting the OFAC authorization to send money to Iran even during the tough time of the sanctions. Thanks to Mr. Ramin Asgard, the attorney who made this possible. 6- The next action happened recently, which was to write a letter to President Trump to ask to lift the travel Ban on our educated, civilized young generation who are dreaming to come here and the ones who are already here and are at the verge of deportation to be exempted from this order. This request was accompanied by a strong and tangible document about Iranians in high positions serving the American people in the business and academic field. 7- Publishing IAMA Bulletin and mailing it to the members and non-members for many years. In the recent past few years, having it online and emailing it to the members and non-members of IAMA. 8- IAMA website has been under constant renovation and reconstruction to be competitive, dynamic and functional to serve you better by the efforts of Dr. T. Armaghany and her team. Please spend a few minutes of your time & visit IAMA website at www.iama.org to enjoy the content. 9- IAMA also adjusted herself with

time and created its own social media section on Facebook by the hard work and efforts of Dr. K. Katouzian, chair of the social media committee of IAMA and fundraising online, thank you for your hard work. IAMA, which has survived 25 years with pride and dignity by itself is a great achievement. As I mentioned before, these are just a few examples of IAMA activities and achievements both here and in Iran.

All of these and many more achievements have been due to your support and now we are asking **renew your membership** and consider asking a friend or colleague to join IAMA as well. Your membership keeps IAMA strong and stronger, which helps shape the future of all of us to help each other especially our young generation. Many thanks to those of you who have paid membership and have been very generous and donated money to advance IAMA agenda like the project in Bam or helping devastated people in the Kermanshah earthquake.

Beside your support there have been loyal people in the administration of IAMA who have worked hard for you with dedication during the past 25 years. As nobody is like each other, these administrators also have been different. The one we have now during the past two years have done a marvelous job under directorship of Professor H. Shokouh-Amiri, the busy transplant surgeon. Even in between his cases, he would call IAMA secretary or whoever to assign a task, isn't it amazing. Of course all the other members of his administration also have been working hard for you and have done a great job including Dr. H. Mohajer (vice

president), Dr. H. Ataei (treasurer}, Dr. M. Shokouh-Amiri (Secretary), Dr. P. Torrei, (correspondent secretary), Dr. T. Armaghany (Member at large and hard working chair of the website committee), Dr. Sina Madani (member at large and member of website committee), Dr. K. Katouzian (chair of IAMA Social Media, Facebook and online fundraising), Dr. Ali Nourbakhsh (chair of CME committee), and Dr. Hamid Shidban (chair of the membership committee). Thank you all for your dedication and hard work. Our chapters have been working very hard with enthusiasm to advance the IAMA agenda too. Their presidents according to alphabetic are: state of CA, Dr. Omid Ashouri who rejuvenated CA chapter again and made great contribution during the 24th annual meeting of IAMA in San Diego with his wife and other members of the Board. Dr. Khosro Farhad, president of the MA chapter with his board members have been working constantly to arrange the quarterly lecture series in Boston. Dr. F. Ghazi, president of the OH chapter in Cincinnati with the members of his Board has done a unique job, besides doing the ordinary duties of the chapter, he has arranged his orchestra in Cincinnati who are all Iranians performing quarterly for the public which is sponsored also by the University of Cincinnati. He also has been the key member artist during every Annual Meeting of IAMA, which his performance never be forgotten. The Late Dr. R. Hedayati, President of NY chapter who worked very hard to encourage the people to become member of IAMA and at the same time managed every other month the public awareness lecture series with the

members of his Board. IAMA especially NY chapter misses him very much and as I mentioned before, we have problem to find his replacement because nobody likes to take his seat. Dr. S. Mortazavi, president of the NJ chapter and his board members also have done a great job to manage the chapter's agendas and have Public Awareness lectures every other month with NY chapter. He also has been very active to offer the job and train IAMA Javaan to be prepared for getting residency. Dr. Shahin Tavakoli, president of the TX chapter with his Board members have been the model of activities for our chapters. They did a fantastic job during the 25th Annual Meeting of IAMA in Houston TX as host committee. Of course their adviser Dr. H. Mohajer, Vice President of IAMA who is living in Houston, TX has been a key figure. Everyone had a great time and memory of the meeting. Thank you all.

The only thing I can say about the Board of Trustees is full cooperation with the Board of Directors, and dedication to IAMA, thank you Dr. J. Moshirpur & Dr. S. Bozorgzad, founder and State Trustees, for all your help and engagements. Due to the dedication and hard work of the Board of Directors Executive Board of Trustees extended the term of their services for another two-year term, congratulations.

On the other hand the past year has been a very sad year for IAMA to lose a few wonderful and dedicated members of IAMA like Dr. P. Zand, founder, Dr. H. Mirlohi the previous dedicated and loyal member of the Board, Dr. R. Hedayati, Chairman of the New York Chapter. As a result according to

the Bylaws, Professor H. Shokouh-Amiri was appointed by the executive Board of Trustees as founder elect, Congratulations again.

Your continued support is greatly appreciated.

The strength of every organization is based on the numbers of its membership. If you HAVE NOT yet renewed your membership, please do so by clicking on the link below to download the attached membership form, complete and mail it with the membership fees to IAMA, PO Box 8218, Haledon, NJ 07538 or you also may simply go to www.iama.org and do it electronically. Thank to those who have already joined and renewed their membership too. Again please encourage your friends also to become members as well. Many thanks in advance,

Amir Ganchi, MD

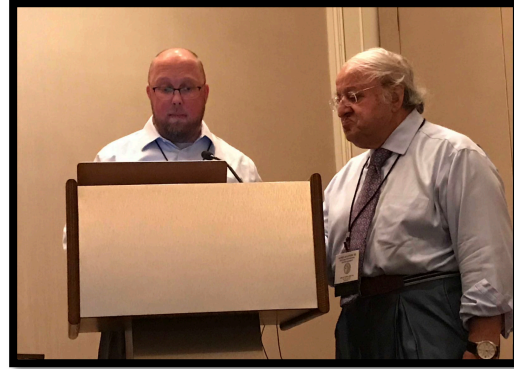
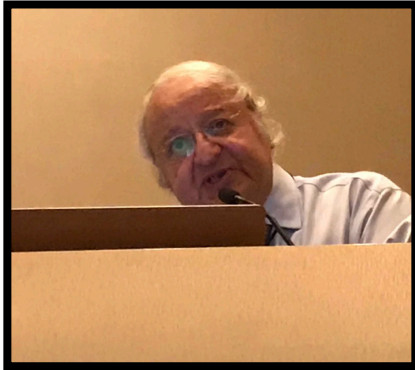


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IAMA had a generous donation and a sponsorship from Dr. Alfred Aflatooni, the Iranian owned pharmacy company named Portland Professional Pharmacy. He sponsored the Saturday Lunch during the annual meeting of IAMA. He has also pledged to match \$50 a member in the 2018 calendar year.

IAMA would like to thank him and appreciate his input. His representative, Mr. Jesse Drake also gave us detailed information regarding their company services and how they could help the customers. The telephone number is 503-255-2546 for the Portland Professional Pharmacy.

*And this I know: whether the one True Light
Kindle to Love, or Wrath-consume me quite,
One Flash of It within the Tavern caught
Better than in the Temple lost outright.*

با تو بجز ايات اگر گويم راز به زانکه بجز ارب كنم بي تو نماز
امی اول دای هنر خلعان جبهه تو خواهی تو مرا بسوزد خواهی نبوز





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](tel: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.

*Save
the
Date*

IAMA

26th Annual Meeting



May 24 – 27, 2019

Chicago, IL

Meet old friends.... Make new friends

Show the power of your organization

British Iranian Kurdish professor Caucher Birkar wins ‘Nobel of mathematics’ Fields medal



RIO DE JANEIRO,— Kurdish refugee turned Cambridge University math professor Caucher Birkar was among four winners Wednesday in Rio de Janeiro of the prestigious Fields prize, dubbed the Nobel for mathematics, but had his gold medal stolen minutes later. It was an embarrassing debut for crime-ridden Rio, the first Latin American city ever to host the Fields ceremony, which takes place every four years.

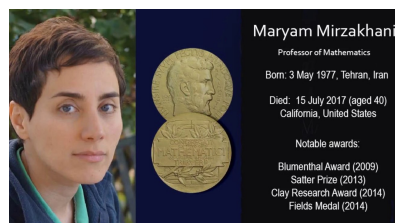
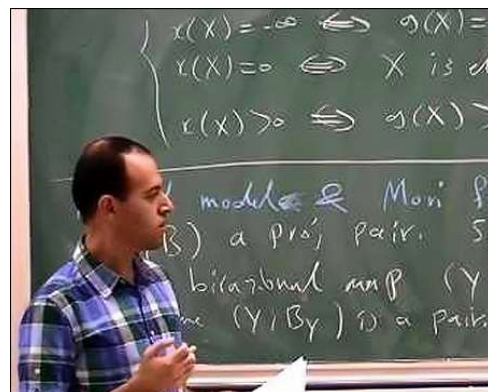
Less than an hour had passed since Birkar, a 40-year-old specialist in algebraic geometry, had been handed his 14 karat gold medal when his briefcase went missing. The organizer behind the event, the International Congress of Mathematics, said it “profoundly regrets” the incident.

Birkar celebrated his achievement — alongside co-winners Alessio Figalli, Peter Scholze and Akshay Venkatesh — as a fairy tale come true for the often beleaguered Kurds. “I’m hoping this news will put a smile on the faces of those 40 million people,” he said.

Born in a village in the ethnic Kurdish province of Mariwan in Iranian Kurdistan (Rojhelat), near the Iran-Iraqi Kurdistan (Bashur) border, Birkar said “Kurdistan was an unlikely place for a kid to develop an interest in mathematics.”

Despite that, he went from Tehran University, where he recounts having looked up dreamily at portraits of past Fields winners, to get political asylum and citizenship in Britain — and establish himself as an exceptional mathematical mind. “To go from the point that I didn’t imagine meeting these people to the point where someday I hold a medal myself — I just couldn’t imagine that this would come true,” Birkar told Quanta Magazine.

The Fields medal recognizes the outstanding mathematical achievements of candidates who were under 40 years old at the start of the year. At least two and preferably four people are honored each time.

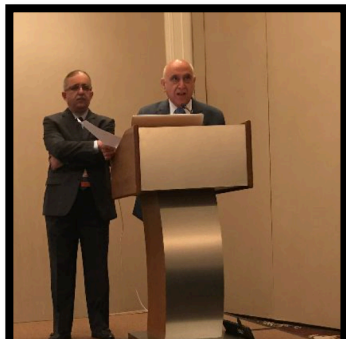


In 2014, Maryam Mirzakhani, from Iran, became the award’s first and so far only female winner. She died in 2017.

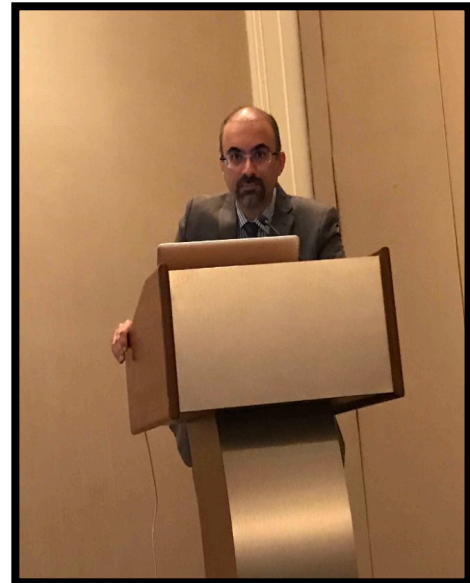
SCIENTIFIC ABSTRACTS PRESENTED AT THE 25th ANNUAL MEETING OF IAMA May 25 – 28, Houston, TX



Friday night Registration and Welcome Reception.



Dr. H. Shokouh-Amiri, President &
Dr. S. Tavackoli, Chair of TX Local
Organizing Committee welcoming
all to meeting.



CME Program Introduction by
Dr. A. Nourbakhsh, CME
Committee Chair

Session 1 - Moderators

Jasmin Moshirpur, MD – Alireza Shamshirsaz, MD



Multidisciplinary team learning in the management of the morbidly adherent placenta: outcome improvements over time.

Hadi Erfani, Karin A. Fox, Amir A. Shamshirsaz, Bahram Salmanian, Jerasimos Ballas, Martha Rac, Jimmy Espinoza, Concepcion R. Diaz-Arrastia, B Wycke Baker III, Christopher Cassady, Shiu-Ki Rocky Hui, Jun Teruya, Venkata Bandi, Michael Coburn, Wesley Lee, Edwina J. Popek, Steven L. Clark, Michael A. Belfort, Alireza A. Shamshirsaz - Baylor College of Medicine, Houston, TX



Background:

Morbidly adherent placenta (MAP) is a serious obstetric complication causing mortality and morbidity. Objective: To

evaluate whether outcomes of patients with morbidly adherent placenta improve with increasing experience within a well-established multidisciplinary team at a single referral center.

Study Design: All singleton pregnancies with pathology-confirmed MAP (including placenta accreta, increta or percreta) managed by a multidisciplinary team between January 2011 and August 2016 were included in this retrospective study. Turnover of team members was minimal and cases were divided into two time periods so as to compare two similarly sized groups: T1 = January 2011 to April 2014 and T2 = May 2014 to August 2016. Outcome variables were estimated

blood loss (EBL), units of red blood cell (RBC) transfused, volume of crystalloid transfused, massive transfusion protocol (MTP) activation, ureter and bowel injury and neonatal birth weight. Comparisons and adjustments were made using student t-test, Mann Whitney U test, Chi Square test, ANCOVA and multinomial logistic regression.

Results: A total of 118 singleton pregnancies, 59 in T1 and 59 in T2 were managed during the study period. Baseline patient characteristics were not statistically significant. Forty-eight of 59 (81.4%) patients in T1, and 42/59 (71.2%) patients in T2 were diagnosed with placenta increta/percreta. The median [interquartile range] estimated blood loss (T1: 2000 [1475-3000] vs T2: 1500 [1000-2700], $P = 0.04$), median RBC transfusion units (T1: 2.5 [0-7] vs T2: 1 [0-4], $P = 0.02$) and median crystalloid transfusion volume (T1: 4200 [3600,-5000] vs T2: 3400 [3000-4000], $P < 0.01$) were significantly less in T2. Also a massive transfusion protocol was instituted more frequently in T1: 15/59 (25.4%) vs 3/59 (5.1%); $P < 0.01$. Neonatal outcomes and surgical complications were similar between the two groups.

Conclusion: Our study shows that patient outcomes are improved over time with increasing experience within a well-established multidisciplinary team performing 2-3 cases per month. This suggests that small, collective changes in team dynamics lead to continuous improvement of clinical outcomes. These findings support the development of centers of excellence for MAP staffed by stable, core multidisciplinary teams, which due to the referring nature of their practice should perform a significant number of these procedures on an ongoing basis.

What is New in Fetal Surgery? Texas Children's Fetal Center Experience

Alireza Shamshirsaz, MD

With the advancements in modern prenatal imaging, the identification of congenital birth defects or fetal malformations has increased. As these defects and malformations have become more readily identified, the number of innovative therapies has also amplified. At Texas Children's Hospital for minimally invasive fetal interventional procedures we use a low pressure CO₂ in-utero environment to enhance visualization in closed fetal therapies (1-3). The purpose of this abstract is to present new findings in the field based on our experience.

In treating Twin-Twin Transfusion Syndrome (TTTS) with laser ablation, we physically separate the vascular territories on the placental surface, a technique called "Solomonization". We showed that this technique significantly decrease the risk of twin anemia polycythemia sequence and recurrent TTTS. (4) Also, in cases of anterior placenta we perform laparoscopic assisted laser procedure to facilitate fetoscopic entry through the posterior aspect of the uterus. (5) Another application of fetal therapy is to release the amniotic bands by fetoscopy for preservation of the limb structure and function. We also perform this intervention to prevent the lethal consequences of cord strangulation. (6)

In selected cases of fetal chorioangimoa with evidence of fetal cardiac compromise and/or fetal hydrops, we perform fetal interventional procedures to interrupt the blood supply of the tumor and reverse fetal heart failure. Fetoscopic laser ablation is the most commonly performed procedure in this circumstance and we have shown encouraging results (7).

Lower Urinary Tract Obstruction (LUTO) is a group of conditions involving obstruction of the fetal urinary bladder neck. We proposed that the best way to evaluate renal function in these cases is by ultrasound morphology of

the kidneys to detect cases with evidence of dysplasia and repeated vesicocentesis (potentially repeated up to three times) for examination of fetal urinary biochemistry after 18 weeks. (8) Shunt placement is the fetal intervention of choice in these cases. We showed that the Rocket shunt is associated with increased likelihood to remain in place compared to the Harrison shunt (9). Shunts are also place

to treat specific cases of fetal pleural effusions and fluid filled space occupying chest lesions. At Texas Children's Fetal center we also showed it is prudent to attempt permanent resolution of fetal hydrothorax with initial thoracentesis and reserve shunt placement for recurrent episodes while avoiding complications associated with shunt placement (10). Another effort by our team was to evaluate feasibility and initial outcomes of fetoscopic tracheal occlusion for severe diaphragmatic hernia. We found that this procedure is associated with improved postnatal outcomes in severe left diaphragmatic hernia. (9) Our team also performed a systematic review to provide a comprehensive overview on the clinical course, perinatal outcome, and effectiveness of prenatal management options for pericardial teratoma. We provide the notion that while most fetuses tolerate pericardiocentesis, the neonatal benefit of this procedure is still uncertain, and outcomes of other interventions had variable success. (11) In another effort, our randomized clinical trial on efficacy of elective late preterm delivery of the fetus with gastroschisis showed no benefit of elective late preterm delivery of fetuses with gastroschisis when postnatal gastroschisis management is similar to that used in routine care. (13)

We believe that minimally invasive fetal surgical techniques will replace most open fetal surgeries in the near future and we look forward to a time that fetal surgery does not come with a risk of significant maternal and neonatal morbidity.



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Trends in perinatal mortality and racial/ethnic disparity among twins in the United States, 2000-2013

Hadi Erfani, MD, MPH;¹ Amir A. Shamshirsaz, MD;¹ Cande V. Ananth, MPH, MSc, PhD;² Antony M. Vintzileos, MD;³ Steven L. Clark, MD;¹ Michael A. Belfort, MD, PhD;¹ Alireza A. Shamshirsaz, MD.¹



1-Baylor College of Medicine, Houston, TX; 2-Columbia University, New York, NY; 3-NYU Winthrop Hospital, Mineola, NY.

OBJECTIVE:

We performed an epidemiological investigation of trends in twin perinatal mortality overall and by major race/ethnicity group in the U.S. between 2000 and 2013.

STUDY DESIGN:

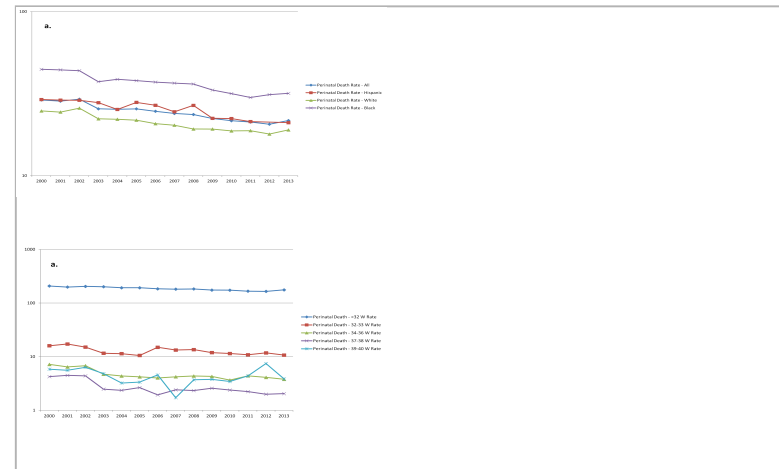
We undertook a population-based retrospective analysis of twin perinatal mortality in the United States (2000-2013) among newborns without congenital malformations and chromosomal abnormalities. We utilized 'Period Linked Birth – Infant death' and 'Fetal Death' data files from the National Center for Health Statistics for years 2000 – 2013. Perinatal mortality was defined as stillbirth at ≥ 22 weeks and neonatal death up to 28 days. Also, perinatal mortality was calculated for different categories of race/ethnicity (i.e. Hispanic, non-Hispanic Black and non-Hispanic White).

RESULTS:

The overall number of twin perinatal deaths from 2000 to 2013 was 40,156/1,646,922 (24.4 per 1000 live births). Table shows the rates for perinatal mortality in overall and by race-ethnicity. In all racial/ethnic groups the overall trend of twin perinatal mortality was decreasing; however, during each year of this trend analysis twin perinatal mortality was the highest in non-Hispanic Black population followed by Hispanic and non-Hispanic White population.

CONCLUSION:

Perinatal mortality among twins decreased between 2000 and 2013 in all ethnic groups. During all 14 years of this trend analysis non-Hispanic Black and White population demonstrated the highest and lowest perinatal mortality rates, respectively. Racial disparities in health care availability, access, or utilization by underserved populations with twin gestation remain important issues in efforts to decrease perinatal mortality in the U.S.

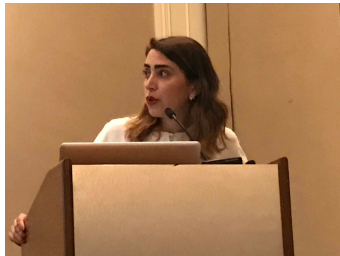


Perinatal Death Rate per 1000 Twin Birth in the United States													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2013
Perinatal Death Rate - All	28.9	28.5	29.2	25.6	25.4	25.5	24.7	23.9	23.6	22.3	21.6	21.2	20.6
Perinatal Death Rate - Hispanic	29.1	28.9	28.8	27.9	25.3	28.0	26.8	24.5	26.8	22.4	22.3	21.4	21.0
Perinatal Death Rate - White	24.8	24.4	25.8	22.2	22.1	21.8	20.7	20.3	19.2	19.2	18.7	18.8	17.9
Perinatal Death Rate - Black	44.5	44.1	43.6	37.4	38.7	37.9	37.2	36.6	36.2	33.3	31.6	30.0	31.2

Genetic screening and testing in pregnancies conceived by In Vitro Fertilization (IVF) with pre-implantation genetic screening (PGS)

Authors: Sara Arian (1), Ignatia Van den Veyver (1, 2), Hadi Erfani (1), Salma Nassef (2), William Gibbons (1), Lauren Westerfield (2)

(1) Obstetrics and Gynecology, (2) Molecular and Human Genetics, Baylor College of Medicine



Objective:

Although residual risk for aneuploidy during pregnancy is lower after transfer of an embryo with a

normal PGS result, these women are still offered standard aneuploidy screening and testing. Which screens or tests they choose to undergo however has not been previously studied. Therefore, our objective was to investigate prenatal screening and diagnostic testing in pregnancies conceived by IVF with normal PGS results from one academic center and several private fertility clinics.

Methods: We reviewed medical records of 83 women who received prenatal genetic counseling between 1/2012 and 4/2017 for a pregnancy following IVF with normal PGS results (including six with preimplantation genetic diagnosis (PGD) in addition to PGS). Following data was extracted: maternal age (MA), donor age (DA) if donor oocytes or embryos were used, ethnicity, parity, gestational age (GA), and family history of chromosomal abnormalities in first or second degree relatives. We recorded which prenatal genetic screen or diagnostic test was performed: first trimester screening (FTS), second trimester serum screening (STS), non-invasive prenatal testing (NIPT), amniocentesis, or chorionic villus sampling (CVS).

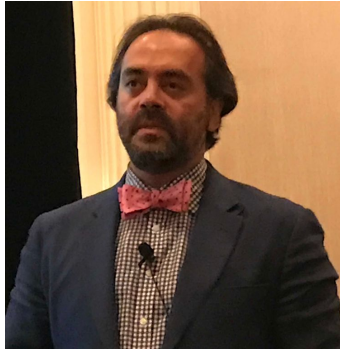
RESULTS: 74 women were pregnant with autologous oocytes (mean MA 37) and 9 with donor oocytes (mean MA 42; DA 27). GA at genetic counseling was 15 (8-23) weeks. There were 61 (73.4%) singletons, 21 (25.3%) twins and 1 (1.2%) triplets. 53/88 (63.9%) had ≥ 1 of the following: 14 (16.9%) FTS, 38 (45.8%) NIPT, 5 (6%) STS, 2 (2.4%) CVS and 3 (3.6%) amniocentesis. 9/13 women (69.2%) with and 44/70 (62.9%) without a family history of a chromosomal abnormality underwent ≥ 1 test. 28/59 (47.5%) women \geq age 35 and 10/24 (41.7%) $<$ age 35 or pregnant with donor eggs had NIPT.

Conclusions: In this retrospective cohort, most women who were pregnant after IVF with normal PGS results elected to proceed with some form of further prenatal screening or testing during their pregnancy. Only few underwent diagnostic testing including amniocentesis (3 patients) or CVS (2 patients). Given that PGS techniques may not be adequate for the detection of chromosomal mosaicism and other chromosomal abnormalities beyond aneuploidy, prenatal screening or testing for chromosomal abnormalities is still recommended during pregnancy, even after transfer of embryo(s) with a normal PGS result. However, the residual risk for aneuploidy after PGS is poorly defined.



Launching Fetal Surgery Fellowship in Iran: 2018 Update

Alireza Shamshirsaz, MD



The identification of congenital birth defects and fetal malformations continues to increase during the antenatal period with improved

imaging techniques. Understanding of how to treat specific fetal conditions continues to improve outcomes from these treatment modalities. In an effort to further improving the perinatal health in this field we started to define a perinatal surgery fellowship in Iran. Fetal surgery is a combination of states of art and technology and human resources in launching a new fetal center with such capabilities are limited. We were succeeded to develop a collaborative approach with two of the most prominent medical universities in Iran, Tehran University and Shiraz University of Medical Sciences. Hundreds of person-hours were spent on policy planning and program development by the program director, which is licensed to do fetal surgeries both in Iran and the US, and the major policymakers from the Departments of Obstetrics and Gynecology affiliates and the Ministry of Health and Medical Education. Beforehand, as an important social factor in Iran, religious scholars were consulted on the details of the procedures and the permission from the Islamic point of view (Fitwa) was granted by them. The program has started in 2013 with performance of an open fetal surgery for a case of neural tube defect in Shiraz at 2013. Moving forward we succeeded to start the fellowship program in 2017 with two equipped active sites in Tehran, Iran. Infrastructure improved to enable the active sites for performing state of the art interventions such as Laser ablation for Twin-Twin Transfusion Syndrome (TTTS), fetoscopic repair of Neural Tube Defects,

shunt placements for Lower Urinary Tract Obstruction and etc. The program was granted accreditation by the Ministry of Health and Medical Education and recruitment of the candidates for fellowship has begun. So far, approximately 10 successful in-utero laser ablations for treatment of TTTS have been done. In this abstract we presented a sample of an international collaboration, started by and Iranian born US trained physician, which led to improving overall health using cutting edge technologies which are not normally available in developing countries otherwise, except after a huge time lag.

The True Meaning of Life

*"We are visitors on this planet,
we are here for ninety
or one hundred years
at the very most.*

*During this period,
we must try to do something
good, something useful
with our lives.*

*If you contribute to other
people's happiness, you will
find the true goal,
the true meaning of life."*

Dalai Lama

Session 2 – Moderators

Sohrab Fallahi, MD – Mehrdad Massumi, MD

NEED PHOTO

Location of the thyroid nodules within the gland and risk of malignancy.

Type of study: prospective one year study

Author: Tooraj Zahedi, MD



Setting:
teaching
hospital

Text: all the
thyroid nodules
biopsied
between
6/1/2016 and

6/1/2017 were evaluated by sonography for the location of the nodule within the gland. Three different categories were designated; namely lower half, upper half and isthmus nodules. Nodules were also evaluated for other potentially suspicious characters on the sonogram. All biopsies were done by the author and evaluated for cytopathological diagnosis by expert cytopathologists. Suspicious nodules; Bethesda 3 and 4 were also evaluated for genetic mutations or changes that are commonly seen in thyroid malignancies and then categorized as benign or potentially

Malignant or suspicious. The latter categories were referred for surgery and then further categorized as malignant or benign based on the pathology of the surgical specimen.

Results: chances of malignancy was found to be significantly higher in the nodules located in the upper half of the thyroid lobes as compares to those in the lower half or the isthmus. This association persisted after regression analysis considering other suspicious echo characters of the nodules.

Understanding Gout as an old and chronic disease.

Sohrab Fallahi, MD, FACP, FACR

Clinical Assistant Professor of Medicine
University of Alabama (UAB) School of
Medicine/UAB Health Center, Montgomery,
AL

Gout is a chronic, progressive disease with different stages consisted of asymptomatic hyperuricemia, acute flares, inter critical periods and advanced gout leading to persistent joint destruction, deformities,



chronic, renal
failure and
increased risk of
cardiac and
cerebrovascular
events (CVA).

Biologically
significant

hyperuricemia

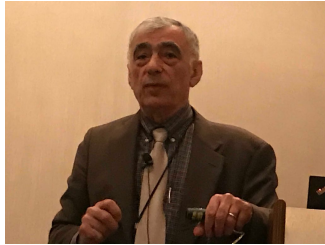
occurs when serum urate levels remain elevated in excess of urate solubility (at 37 degree centigrade is ~6.7 mg/dl in vitro). Above 6.7 mg/dl, urate begins to precipitate as monosodium urate (MSU) crystals that can deposit in joints, soft tissues including kidneys leading to gout flares, joint damage, renal failure and increased CVA risk,

For this mixed group of audience from different medicals fields is important to increase awareness that the treatment of gout does not finish by only aborting the acute attack of gout. During the inter critical periods also, by appropriate treatment of gout and maintaining a serum uric acid consistently below 6mg/dl one can prevent joint attacks of gout, decrease bulk of urate tissue deposit, improving renal function and decrease the additional CVA risk caused by gout.

Biological drugs in the treatment of rheumatoid arthritis.

Sohrab Fallahi, MD, FACP, FACP

Clinical Assistant Professor of Medicine
University of Alabama (UAB) School of
Medicine/UAB Health Center, Montgomery,
AL



Rheumatoid arthritis (RA) is a chronic inflammatory disease characterized by joint pain, tenderness,

swelling, and destruction of synovial joints, which leads to deformities, work loss, disability and premature death. Additionally patients with RA are at a n increased risk of coronary artery and cerebrovascular events due to inflammation, Increased risk of solid tumors and lymphoma in RA patients is also thought to be due to inflammation. Increased risk of solid tumors and lymphoma in RA patients is also thought to be due to the inflammatory process.

Disease modifying anti-rheumatic drugs (DMARDs) such as methotrexate, sulfasalazine, hydroxychloroquine or leflunomide as a single or combination therapy, control the sgins and symptoms in a substantial number of patients with RA, but joint damage, deformities an eventually disability was seen in up to 50% of those patients within 5 years.

Biological agents used as monotherapy or in combination with older DMARDs have revolutionized the outcome in the treatments of RA. Since the use of biological DMARDs in the past two decades total control of the signs and symptoms, or low disease activity in patients with RA, has become a common reality. Furthermore, stop or slowing down the joint erosion has become a reality, classic joint deformities and early disabilities are much less common or occur much later.

It is important for this mixed group of audience members from different specialties of medicine to be aware that since the late 1990s when biological DMARDs became part of the standard of care in the treatment of RA, patients have significantly better control of their signs and symptoms, cessation of the joint destruction is now a reality, increased longevity and decreased disability is very much expected, of course with substantial increase in health care costs.



Mechanism based treatment of Pain

Mehrdad Michael Massumi, MD



Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage. Pain may be nociceptive (

caused by activity in neural pathways in response to potentially tissue-damaging stimuli), mixed or neuropathic (initiated or caused by primary lesion or dysfunction in the nervous system).

Prevalence of neuropathic pain in the US is over four million individuals. In this presentation the pathophysiology of neuropathic pain and the mechanism / pharmacology of select adjuvants – as well as their efficacy and applications – will be reviewed.

Outcomes of clinical trials for the treatment of Painful Diabetic Neuropathy – PDN, Post-herpetic neuralgia – PHN and Trigeminal neuralgia – TGN as well as the efficacy of single or polypharmacy for such pain syndromes – to address lancinating, burning and cramping pain or to temper syndromes of allodynia, hyperalgesia, hyperpathia, etc. will be reviewed.

Among these adjuvants are antidepressants, anticonvulsants, antiarrhythmics, topical formulations, analgesics, etc. – the principles and protocols of use will be reviewed.

The pathophysiology of descending spinal pathways, peripheral sensitization, central sensitization and other mechanisms will be discussed.

The following meds or med families – as used in pain management – will be reviewed in quick succession:

Gabapentine, pre-gabalin, lamotrigine, dextromethorphan, duloxetine, venlafaxine, tricyclics, oxycodone, carbamazepine, oxacarbazepine, lidocaine, milnacipran.



A blind man who sees is better than a sighted man who is blind.

Session 3 – Moderators

Hormoz Azar, MD - Keyvan Nouri, MD

Lasers for Treatment of Vascular and Pigmented Lesions, Tattoo and Hair Removal

Keyvan Nouri, MD



This talk will review the basic lasers application in treatment of skin conditions such as vascular lesions, pigmented lesions and also usage of laser and light sources in tattoo and hair removal. The most

popular lasers and light devices for treatment of these skin conditions will be covered. Treatment protocols along with the ways to prevent the treatment complications will be discussed. This presentation will serve as introduction in use of laser in Dermatology and Plastic Surgery.

Identifying preoperative predictors of weight loss and weight regain after Roux-en-Y Gastric Bypass: a prospective human study

Hassan Aliakbarian MD; Eric Sheu MD, PhD; Ali Tavakkoli MD

(Brigham and Women's Hospital, Harvard Medical School, Boston, MA)



Background:

There are limited and inconsistent data about factors determining degree of Weight Loss (WL) after Roux-en-Y

Gastric Bypass

(RYGB). In this study, we evaluate the role of pre-operative hormone levels in predicting

maximum WL and Weight Regain (WR) after RYGB.

Methods: 101 adult patients undergoing RYGB were recruited. The patients' baseline characteristics recorded. Fasting glucose, HbA1c, insulin, glucagon, CRP, active ghrelin, leptin, GLP-1 and GIP levels in serum were measured before surgery. Their follow up weights were monitored. Maximum total body WL (%TBWL_{max}) was calculated using nadir weight within the first 2 years after surgery. WR was calculated over the first 3 years.

Results: The patients had a mean age, weight and BMI of 44.5 ± 1.3 years, 125.7 ± 2.5 kg and 45.3 ± 0.7 kg/m² respectively. 76 patients were female and 26 had type 2 diabetes mellitus (T2D). Age, Gender, Race, initial weight and BMI did not have significant effect on WL, however %TBWL_{max} was significantly greater in non-diabetic patients ($36.3 \pm 1.0\%$ vs $31.3 \pm 1.5\%$, $p < 0.05$). Overall, higher ghrelin level was also correlated with greater %TBWL ($p = 0.01$). Within the T2D group, higher glucagon ($p < 0.01$) was associated with more WL.

Younger age ($p = 0.07$), lower initial BMI ($p = 0.06$), lower %TBWL ($p = 0.07$), Hispanic race, higher GIP ($p = 0.03$) and lower leptin ($p = 0.09$) levels were identified as risk factors for greater degree of WR. T2D patients on oral medication showed more WR compared to those on insulin.

Conclusions: T2D status and baseline ghrelin level are potential predictors of WL in overall cohort. The predictive value of glucagon is limited to T2DM subgroup. Several serum markers may contribute to WR after surgery. We are developing formulas to help predict weight outcomes of bariatric surgical patients based on these pre-operative factors, thus addressing a critical need in this surgical field.

Multidisciplinary Cancer Care Model: The Effect of Nurse Navigators in Improving Outcomes of Cancer Patients

Amir Fathi, MD

Background



There has been a demand for quantitative evidence concerning the quality of cancer care that patients receive. Several recent

publications have called attention to deficiencies in cancer care experiences that are prominent in the immediate period following cancer diagnoses.

Objective

To determine if the involvement of a Gastrointestinal (GI) Oncology Nurse Navigator improves the quality of cancer care.

Interventions/Methods

This retrospective study compared randomly selected GI oncology patients with and without a nurse navigator. Two endpoints, time from diagnosis to treatment and percentage of missed appointments, were evaluated through a review of healthcare records using the Epic Electronic Medical Record system.

Results

Patients enrolled in the nurse navigation system as a part of the multidisciplinary cancer program had a significantly shorter time lapse between the diagnosis to treatment commencement points (P Value < 0.001). In this group, the average time spent between the index diagnosis to the start of treatment was 15.15 days, compared to 42.93 days for patients who were not part of the multidisciplinary GI cancer program.

Conclusion

This study underlines the necessity of multidisciplinary cancer care models with an emphasis on nurse navigation programs to

improve patient outcomes. Nurse navigators serve as treatment guides to direct the patients along shortest and safest path towards the most optimal personalized cancer treatment.

Implications for Nursing Practice

The role of the nurse navigator unites patient-centered care with the nursing process to improve outcomes. The research indicates nurse navigation as part of a multidisciplinary team improves the timeliness of care.

Postprandial Portal Circulation Hormones and Glucose Changes after Sleeve Gastrectomy

Hassan Aliakbarian MD; Eric Sheu MD, PhD; Ali Tavakkoli MD

(Brigham and Women's Hospital, Harvard Medical School, Boston, MA)

Introduction: Bariatric surgery can lead to resolution of diabetes among obese patients, although the underlying mechanism remains unknown. We hypothesize that changes in portal milieu and nutrient sensing are important in early improvement in diabetes after bariatric surgery. Here we test this hypothesis after sleeve gastrectomy (SG).

Methods: A stapled SG was performed in SD rats ($n=6$). A control group underwent short gastric vessels ligation without gastrectomy ($n=6$). Daily weight and food intake were recorded. After 4 weeks, the rats were anesthetized and jugular and portal veins catheters were placed for blood sampling, as well as a proximal duodenum cannula to infuse glucose. Systemic and portal venous blood samples were taken at baseline and 10, 30, and 60 minutes after glucose infusion. Portal and systemic levels of hormones GLP-1, GIP, ghrelin, insulin and glucagon as well as porto-systemic (PS) glucose gradients were determined to assess intestinal glucose utilization. Intestinal glucose absorption was also calculated. Groups were compared using t-tests.

Results: SG led to reduced food intake and weight loss compared to controls (Table 1). Small intestine weight was unchanged after

SG, suggesting absence of the intestinal hypertrophy. SG does not change the Porto-systemic glucose gradient, suggesting no changes in intentional glucose utilization. Intestinal glucose absorption capacity, as reflected in AUC after glucose infusion, also remained unchanged. All these results were in contrast to changes seen after gastric bypass surgery (data not shown). The pattern of hormonal changes after SG includes increasing in postprandial GIP and baseline insulin and decreasing in baseline and postprandial ghrelin (Table 1) which are different from gastric bypass.

Discussion: Our study suggests that early changes in the portal milieu glucose and hormones seen after SG are different from after RYGB. Further comparative studies of these two effective but different bariatric surgeries gives us invaluable clues to discover the mechanisms underlying diabetes resolution after bariatric surgeries.

	Sleeve gastrectomy	Control	P value
Weight increase (%)	36.6 ± 3.5	49.8 ± 2.0	<0.01
Daily food intake (g/day)	23.3 ± 0.4	25.9 ± 0.2	< 0.01
Whole intestine weight (g)	6.5 ± 0.2	6.2 ± 0.3	NS
Baseline PS gradient	-14.1 ± 1.7	-19.6 ± 4.1	NS
Intestinal glucose absorption (AUC) (mg/dl x min)	3072 ± 650	3011 ± 748	NS
Baseline systemic ghrelin (pg/ml)	28.3 ± 9.5	120.4 ± 49	0.06
Baseline systemic GIP (pg/ml)	38.8 ± 8	32.3 ± 7.6	NS
AUC for PS GIP gradient (index of production) (pg/ml x min)	6136 ± 1574	2324 ± 2355	0.03
Baseline systemic GLP-1 (pg/ml)	33.2 ± 12	20.0 ± 1.8	0.13
AUC for PS GLP-1 gradient (index of production) (pg/ml x min)	28625 ± 9010	22028 ± 6575	NS
Baseline systemic insulin (pg/ml)	731.7 ± 178.9	198.2 ± 48.6	<0.01

Table 1.

Creation and evolution of the Community Medicine in Iran

Hossain A. Ronaghy MD MPH



Department of
Medicine University
of California San
Diego

In 1972 a research was
performed by the

author at John's Hopkins University, regarding migration of Iranian medical graduates to the United States. We found (our) up to 90% of Shiraz medical graduate and 40% of Tehran graduate were permanently migrating to the United States. Further research indicates the cause of migration to be military housing income and sociopolitical facts. Furthermore, we found the curriculum of most medical schools in Iran is a carbon copy of western medical schools and had no relevance with the need of over 70% of Iranian population who were residing in rural communities in the 1970s.

In order to alleviate these, we established the department of community medicine in 1972 in Shiraz to modify

the curriculum of Shiraz medical school with an established and strong academic of clinical discipline was not an easy job, particularly when the medical staff was determined to make Shiraz a "center of excellence" and we in the department of community medicine felt we are desperate for a "program of relevance". As I was a professor of both medicine and community medicine and the chairman of medicine was extremely friendly with our program. We could compromise and eventually, we decided to embark on a new medical school with the totally new program. The new medical school which was established in Fasa was a successful program of recreating students from a small town and we found recently 90% of graduates of first two years are still residing and practicing in Fars province. Unfortunately, later this medical school was joined with all other medical schools with a national matching program, which was against our initial purpose for recruiting from small towns. The other major achievement of the department of community medicine was establishing "health

houses in the rural community which was evaluated and approved by WHO and within eight years more than 1.5 Million of the rural population were covered by that program.

Session 4 – Moderators

Ebrahim Delpassand, MD – Hamid Shidban, MD

Vascular access in dialysis patients Hamid Shidban, MD



Dialysis vascular access management in the United States changed significantly after KDOQI guidelines published in 1997, fistula first initiative in 2003 also improved the rate of AV fistula use over the AV graft and CVS in the dialysis population. Over the past 20 years the patient population undergoing dialysis has become older with complex comorbidities and crating challenges for an ideal dialysis access. AV access related complications also results in considerable morbidity, although advancing knowledge about access pathophysiology and improved process of care with team approach have resulted better outcome.

Different dialysis access and preferred type as well as the challenges for creating and managing the dialysis access will be discussed in this presentation.

Safety and efficacy of a once a day extended release Tacrolimus to improve compliance in organ transplant recipients.

Authors: Hosein Shokou-Amiri, Gazi Zibari, Robert McMillan, Glen Bernatowicz, Jeff Carr and Neeraj Singh



Introduction:

A successful organ transplant is life saving and improves quality of life, but requires life-long immunosuppression. Usually patients are receiving multiple drugs, multiple times a day. This is a real concern and some patients get tired of using their medications appropriately, which creates non-compliance in taking their medication, resulting in acute or chronic loss of organ function. To improve compliance, different techniques have been tried, among others to decrease the frequency of drug intake. Recently a variety of calcineurin inhibitors (Envarsus) which is the main drug for prevention of rejection has been formulated and already has been used widely in Europe. We are reporting other limited experience with this drug.

Method:

44 consecutive kidney transplants, 4 kidney-pancreas and one pancreas alone 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:

One patient showed acute rejection 2.2%. The average start dose was 9 mg once a day (range 5-10) and average maintenance dose was 10 mg (2-27) per day.

Only one patient documented to be non-compliant (2.2%)

Conclusion:

Considering the size and retrospect nature of our patients population, we can conclude that once a day dose of Envarsus is safe and effective in preventing rejection while improving compliance.

Session 5 – Moderators

Amir Zamani, MD – Ali Nourbahsh, MD

Supraspinal Control Variatons In Multiple Sclerosis Patients Who Void Spontaneously Versus Patients With Voiding Dysfunction

Rose Khavari, Christof Karmonik, Timothy Boone

Houston Methodist Hospital, Houston, TX,
Department of Urology



Introduction and Objectives

In this study, we seek to compare brain activity processes at the time of initiation of voiding in Multiple Sclerosis (MS)

patients who are voiders versus patients with voiding dysfunction. We hypothesize that female MS patients with voiding dysfunction have a distinct Blood Oxygen Level Dependant (BOLD) pattern activation in specific *a priori* regions of interest (ROIs) at the time of initiation of voiding when compared to patients who void spontaneously.

Methods

Twenty seven ambulatory female MS patients with lower urinary tract dysfunction were recruited for this IRB approved study: Group 1; voiders (n=15) and group 2; voiding dysfunction (n=12) which was defined as patients with postvoid residual urine of $\geq 40\%$ of their maximum cystometric capacity or

patients who performed self-catheterization. We recorded brain activity via fMRI with simultaneous urodynamic testing (UDS). From the transformed datasets, average fMRI activation maps (student t-test) for both groups were created, and areas of significant activation were identified ($p < 0.05$).

Results

Group-averaged BOLD activation maps indicated distinct differences in activation patterns between groups (figure 1a). A reversed (negative) BOLD effect was noted in the PMC, PAG, left cingulate, left thalamus and the reticular formation.

Interpretation of results

Earlier neuroimaging studies have identified right dorsomedial pontine tegmentum and right inferior frontal gyrus to be associated with increased blood flow in healthy women at the time of voiding. Our results are consistent with these preliminary data in the literature where PMC, PAG, left cingulate, left thalamus and the reticular formation seem to have different pattern of activation between female MS voiders and the ones with voiding dysfunction.

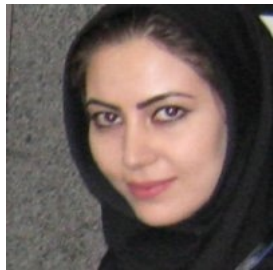
Concluding message

Our preliminary group and network analyses demonstrate that distinct supraspinal patterns of activation and deactivation exists between MS patients who are voiders and who have voiding dysfunction.

It doesn't matter
HOW SLOWLY YOU GO
AS LONG AS YOU
DON'T STOP

Mouse models of Feingold syndrome type 1 and type 2 reveal distinct molecular pathways mediating actions of Mycn and Myc-regulated miR-17-92 microRNAs

Fatemeh Mirzamohammadi ¹, Anastasia Kozlova ¹, Garyfallia Papaioannou ¹, Elena Paltrinieri ¹, Ugur Ayturk ², Tatsuya Kobayashi ¹



¹ Center for Skeletal Research, Massachusetts General Hospital, Harvard Medical School, Boston, MA.

² Orthopedic Surgery Department, Boston Children's Hospital, Boston, MA.

Feingold syndrome is a skeletal dysplasia caused by loss-of-function mutations of either MYCN (Feingold syndrome type 1) or MIR17HG that encodes miR-17-92 microRNAs (Feingold syndrome type 2). Since miR-17-92 expression is transcriptionally regulated by MYC transcription factors, it has been presumed that Feingold syndrome type 1 and 2 are caused by a common molecular mechanism. To test this hypothesis, we conditionally deleted Mycn and Mir17-92, in the mouse skeletal mesenchyme of the skull and limbs. Both models showed reduced proliferation of skeletal mesenchymal cells. We found that Mir17-92 deficiency derepressed Tgfb β 2 and thereby upregulated TGF- β signaling in limb mesenchymal cells. Genetic or pharmacological inhibition of TGF- β signaling efficiently rescued the skeletal defects caused by Mir17-92 deficiency, suggesting that upregulation of TGF- β signaling is responsible for the skeletal defect of Feingold syndrome type 2. In contrast, in the type 1 model, we have found that downregulation of PI3K signaling, but not TGF- β overactivation, plays a major causal role. These results strongly suggest that despite the phenotypical similarity, distinct

molecular mechanisms underlie the pathoetiology for Feingold syndrome type 1 and 2.

A Cross-Sectional Study Of Sexual Function And Fertility Status In Adults With Congenital Genitourinary Abnormalities



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Introduction: Few studies and many over a decade old have investigated sexual function and fertility status in adults with spinal dysraphism or other congenital genitourinary abnormality (CGUA). Only 5 of these studies used validated questionnaires, of which only 2 included both male and female subjects.

Objective: To evaluate sexual function and fertility status in adult patients with CGUA, both male and female, by applying validated questionnaires

Methods: Between 2014 and 2017, 167 adult patients with CGUA were referred to a single tertiary transitional care clinic. 75 patients consented and completed the questionnaires. Of those, 62 patients (26 males, 36 females) with a mean age of 25.1 years (range 15-75) met inclusion criteria and responded to questionnaires pertaining to sexuality and fertility, including the validated Sexual Health Inventory for Men (SHIM) and Brief Index of Sexual Functioning for Women (BISF-W).

Results: Of the 62 participants, 45 (73%) responded to the fertility questionnaire. 26 (58%) had never heard of assisted reproductive technologies, and only 1 had received prior fertility counseling. 60 (97%)

participants responded to the sexual function questionnaire. 21 (35%) reported a history of sexual activity, with 12 (20%) being currently sexually active. 20 (33%) wanted to learn more about sexuality and/or fertility, and 14 (23%) were not currently sexually active but wanted to become sexually active. The response rate for the SHIM questionnaire was 42%, and only 3 females (8%) completed the BISF-W in entirety.

Conclusion: A significant proportion of adults with CGUA are engaging in sexual activity despite having a poor knowledge of sexual and reproductive health. While adults with CGUA desire more education on sexuality and fertility, they are uncomfortable addressing these sensitive topics in our current healthcare environment. Additionally, standard questionnaires are too difficult for this patient population to complete despite assistance. Thus, modifications are needed.

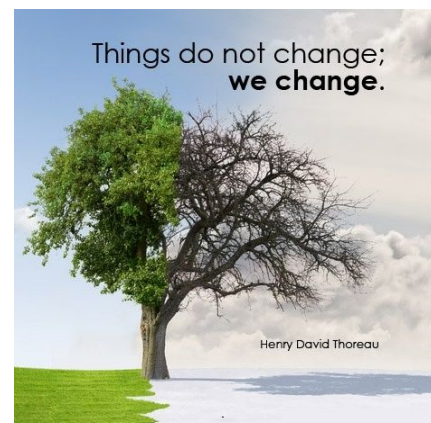
Determining major cell-types that contribute to the extracellular matrix composition of the developing mouse lung

Sadaf Atarod 1 , Benjamin Keenan 1, 2, Christopher Hartman 2 , Richard James 4 , Bob Varelas 3 , Joyce Wang 2 , Laertis Ikononou 1, 2

Center for Regenerative Medicine of Boston University and Boston Medical Center 1 , Department of Biomedical Engineering, Boston University 2 , Department of Biochemistry, Boston University School of Medicine 3 , University of Washington

The main objective of this study was to assess which cell-types contribute to the expression of a signature list of genes (determined via genomic and proteomic analyses) involved in the extracellular matrix composition of the developing mouse lung (E14.5, E16.5, E18.5 and P5). Data derived from RNA sequencing (mouse primordium), mass spectrophotometry, and published literature were used to determine a signature gene list

(n=62) representative of the major extracellular matrix proteins. Lungs from Nkx2-1 GFP embryonic mouse (n=3 litters) were harvested at E18.5. Dispase-collagenase treatment was performed to derive single cell suspensions. Cells were stained for mesenchyme with PE-CD140- α and PE-CD140- β , and endothelium with PECy7-CD31. The epithelial cells were sorted using GFP as the marker. Cells were sorted using BD FACSARIA. Total RNA was extracted from each cell-type population, followed by reverse transcription. Next, cDNA was run on 96-well custom Taqman gene expression array cards that included primer-probe sets for the 62 signature list, lung, thyroid and neuronal markers. Data was analyzed using GraphPad Prism version 7 and heatmap generated using Morpheus, GENE-E software. Data demonstrated that the expression of specific extracellular matrix genes are cell-type dependent. Moreover, the expression pattern is varied between the distal and proximal regions of the lung. This study has demonstrated that specific extracellular matrix proteins are cell-type dependent.



Changes In Brain Activity Following Intradetrusor Injection Of Onabotulinumtoxina In Patients With Multiple Sclerosis: An fMRI Study

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Introduction: OnabotulinumtoxinA (BTX-A) is a well-described treatment for Neurogenic Detrusor Overactivity (NDO) and while its motor effects on detrusor muscle is extensively studied, its sensory effects are not. Prior functional neuroimaging studies have suggested that women with overactive bladder have increased brain activity in the cingulate cortex, insula, and frontal cortex in response to bladder filling. The aim of this study was to evaluate the impact of intradetrusor BTX-A on brain activity in female multiple sclerosis (MS) patients using concurrent functional magnetic resonance imaging (fMRI) and UDS in *a priori* regions of interest.

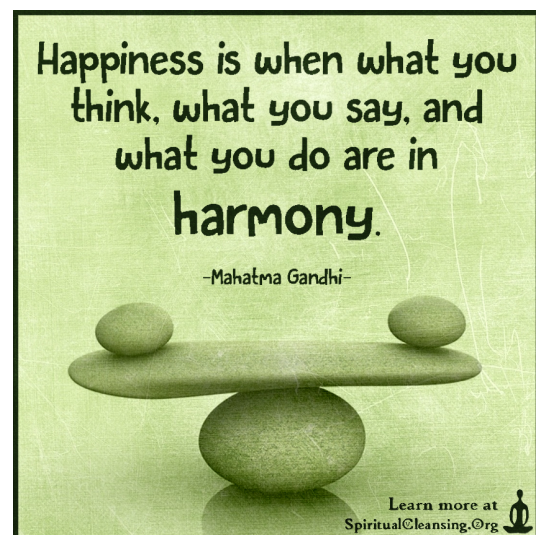
Methods: We conducted a prospective study of 12 women with stable MS and NDO undergoing fMRI with simultaneous UDS prior to and 6-weeks following BTX-A. During the filling phase patients signalled the strong urgency. From individual fMRI activation maps at strong urgency average fMRI activation map in MNI (Montreal Neuroimaging Institute) space were created for pre and post BTX-A from which areas of

significant activation were identified ($p < 0.05$).

Results:

fMRI activation increased post BTX-A in the right cingulate body (x (right positive), y (posterior positive), z (inferior positive) coordinates = 17,4,39, $p=0.0012$), the left posterior cingulate (-7,-37,22, $p=0.02$), the left anterior cingulate (-3,24,8, $p=0.0015$), the right prefrontal cortex (3,51,46, $p=0.0015$), the insula (32,12,14, $p=0.0138$) and the pons micturition center (3,-29,-28, $p=0.05$). Areas that showed decreased activity were sparse and included the left cerebellum (-31,-63,-62, $p=0.001$), the left fusiform gyrus (-40,-3,-28, $p=0.065$) and the bilateral lentiform nucleus (-17,6,-9 and 18,2,-9, $p=0.026$).

Conclusions: Intradetrusor injection of BTX-A appears to increase the activity of the brain regions known to be involved in sensation and process of urinary urgency in female MS patients with NDO. This is the first study of its kind to evaluate the possible sensory effects of BTX-A at the human brain level where sensory awareness is located.



MicroRNA Expression Levels in Cutaneous Acute Graft-versus Host Disease

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Acknowledgements: This investigation was supported by Newcastle University, the Overseas Research Scholarship and the FP7 Marie Curie Initial Training Network CellEurope (Contract No: 315963).

Allogeneic haematopoietic stem cell transplantation (allo-HSCT) is a curative treatment for numerous haematological malignancies. Acute graft-versus-host disease (aGvHD) is the major complication and frequently presents in the skin. MicroRNAs have been reported as potential biomarkers for aGvHD and have received added attention as circulatory biomarkers. This study aimed to identify a signature list of cutaneous microRNAs that could be used as diagnostic biomarkers for cutaneous aGvHD. Global microRNA profiling was performed using a discovery cohort of diagnostic cutaneous aGvHD biopsies (n=5, grades I-III) and healthy volunteers (n=4). Candidate microRNAs were further validated in an independent validation cohort (n=17). Expression of miR-34a-5p ($p<0.001$), miR-34a-3p ($p=0.013$), miR-503-5p ($p=0.021$) and let-7c-5p ($p=0.037$) was elevated in cutaneous aGvHD and significantly associated with survival outcome (miR-34a-3p ROC AUC=0.93, $p=0.021$, Log Rank $p=0.004$; miR-503-5p ROC AUC=0.83 $p=0.003$, Log Rank $p=0.003$). A statistical interaction between miR-34a-3p and miR-503-5p ($p=0.016$) was diagnostic for aGvHD. MiR-34a-5p levels inversely correlated with expression of its protein target p53 in the epidermis ($r^2=0.44$, $p=0.039$). MiR-503-5p ($p=0.001$), miR-34a-5p ($p=0.013$) and miR-34a-3p ($p=0.017$) were also significantly elevated at day 28 post-HSCT in the sera of patients who developed aGvHD vs no-aGvHD (n=30) and miR-503-5p was associated with overall survival (ROC AUC=0.80, $p=0.04$, Log Rank $p=0.041$). In conclusion, this investigation reports that microRNA expression levels in clinical skin biopsies, obtained at the time of aGvHD onset, show potential as diagnostic biomarkers for aGvHD and as predictive biomarkers for overall survival. The same

microRNAs can be detected in the circulation and show predictive association with postHSCT outcomes.

Moderators - Session 6

Bahram Ghassemi, DMD – Pegah Ameri, DMD

Direct composite resin fillings versus amalgam fillings for posterior teeth

Pegah Ameri, DMD



Amalgam has been the traditional material for filling cavities in posterior teeth for the last 150 years and, due to its effectiveness and cost, amalgam is still the restorative material of choice

in certain parts of the world. In recent times, however, there have been concerns over the use of amalgam restorations (fillings), relating to the mercury release in the body and the environmental impact following its disposal. Resin composites have become an esthetic alternative to amalgam restorations and there has been a remarkable improvement of its mechanical properties to restore posterior teeth.

There is need to review new evidence comparing the effectiveness of both restorations.

Bone manipulation procedures in dental implants

Shahram Lashgari, DMD



The use of dental implants for the rehabilitation of missing teeth has broadened the treatment options for patients and clinicians equally. As a result of

advances in research in implant design, materials, and techniques, the use of dental

implants has increased dramatically in the past two decades and is expected to expand further in the future. Success of dental implants depends largely on the quality and quantity of the available bone in the recipient site. This however may be compromised or unavailable due to tumor, trauma, periodontal disease, etc., which in turn necessitates the need for additional bone manipulation. This review outlines the various bone manipulation techniques that are used to achieve a predictable long-term success of dental implants.

In-Flight Medical Emergency. What are your Responsibility and Liability?

Shervin Mortazavi, MD



“Is there a physician or Medical Personnel on board?”

You may have heard this while on air travel. Based on a report in 2017, one in every 604

flights involve a serious and reported medical emergency, which translates to around 44000 in-flight medical emergencies worldwide every year.

The actual number can be significantly higher as there is no mandatory reporting system for these incidents, and minor medical issues are unlikely to be reported.

In 2016 physician passengers provided medical assistance in 48.1% of reported in-flight medical emergencies. This presentation aims to address the following questions:

The role, responsibility and liability of the physician responding to the emergency call

Are you legally mandated to introduce yourself and attend the sick patient?

What type of equipment and medications are available on flight.

Will there be and ground back up and support provided.

In case of an adverse or unfavorable outcome, can you be held liable in a court of law.

And making the ultimate decision whether to reroute the flight for early landing or continuing the flight plan.

“Oral health recognition and integration to general health”

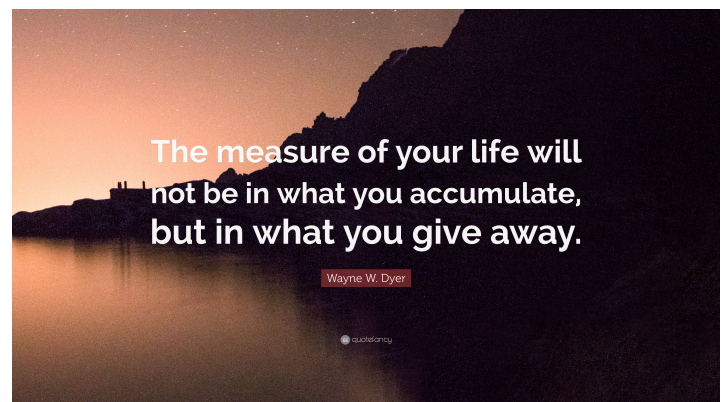
Shabnam Seyedzadeh Sabounchi, Sepideh Seyedzadeh Sabounchi

Significant advances and improvements have been made in the field of dentistry for dental disease treatment. However the incidence rate of oral health disease has not decreased and is a major public health problem according to the global burden of disease report. This may indicate that oral health problem definition is not sufficiently comprehensive and needs to take into account the real world complexity and interactions between biological, medical, psychological, behavioral and social factors. Redefining the oral public health problem by collaborations between oral and general health practitioners, health academia and policy makers through incorporating a mixed approach and viewing the problem in a wider perspective can help reduce inequity and improving oral health care access. The major public problems in dentistry including caries, gingival and periodontal diseases, oral mucosal lesions and traumas are all common chronic conditions that affect child, adult and elderly groups worldwide. In the US, dental decay compared to two common general health problems asthma and allergic rhinitis is considerably 5 to 7 times as common. Untreated tooth decay of the permanent teeth has been the most prevalent disease globally by affecting one-third of the world inhabitants. So there is a great venue and need to incorporating the new definition of oral health into health care programs and dental

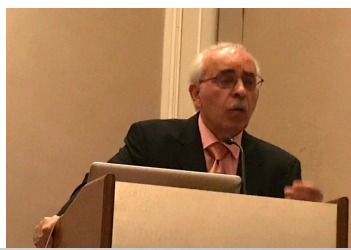
schools. Public have already shown that they are aware of the significance of their health but seem to be not aware of the impact oral health on their general well being. At the same time knowledge on association of oral health diseases with mental, psychological and social factors can highly assist them in recognizing factors that can be effective in their life style and move them towards a healthy lifestyle by empowering patients regarding choosing dental care wisely.



Dr. Sooudi and Dr. Torrei



**DR. MOHAJER CULTURAL
SPEAKER**



Outline of Dr. Homayoon Mohajer's cultural speech about Mowlana Jalal-addin Mohammad Molavi, known as Rumi and his thoughts on the religion of love. IAMA 25th annual scientific and cultural meeting, Sunday May 27, 2018, Houston, Texas

" Mowlana Jalaladdin Mohammad Mowlavi Balkhi also known as Rumi"

Jalauddin Mohammad Balkhi(Rumi) was born September 30, 1207, in Balkh, Afghanistan , which was then part of the Persian empire."

The name Rumi means " from Roman Anatolia". Anatolia is a part of the ancient Asia minor and at the present day is the most part of Turkey.

He was not known by that name, of course , until after his family fleeing the threat of the invading Mongol armies, emigrated to Konya., Turkey sometimes between 1215 and 1220.

His father Bahaoddin moved his family westward, around 1216, on a journey of more than 2000 miles They traveled through Nayshapur to Baghdad and Mecca, then on to Damascus Syria. Then family finally settled in the capital of Rum, Konya, around 1229, where Rumi's father by now in his late seventies, gained a position in a madrese (college) having won favour of the Seljuk Sultan Alaoddin Kay Qobad, In 1224. At the age of seventeen , Rumi married Gowhar Khatun, in 1224. His wife was seventeen too from Samarghand. They had two children. Alooaddin born 1225 and Soltan Valad born in 1226. At his father's death in 1231 , Rumi took over his post at the madrese, At that time he was twenty-four who had not yet completed his studies.

One of his father's most senior and devoted pupils, Borhanoddin Mohaqaqqq Trmazi, soon arrived at the madrese and became Rumi's scholarly and spiritual mentor.

Borhanoddin despatched Rumi in Syria to complete his education, first in Aleppo, then in Damascus, leaving his young wife and two sons behind in Konya for five years. (1233 to 1237), during which time he studied the traditional curriculum of all the religious sciences, including law and jurisprudence. Rumi is thought to have heard lectures by the great mystical philosopher and visionary Muhyiddin Ibn Arabi, and his pupil Sadroddin Qonavi in Damascus. Rumi's spiritual education began in earnest, however , when he returned to Konya in 1237 and Borhanoddin engaged him in rigorous ascetic practices. Borhanoddin died in 1241, as did Rumi's wife , Gohar Khatun, in the following year. Soon after, he married a young widow, Kerra Khatun, with whom he had at least two children.

The most intense period of Rumi's life began in 1244, when he met Shamsoddin of Tabriz, the great teacher who was to " cook and burn" Rumi's soul. Shamsoddin was both an impassioned mystical adept and deeply learned scholar of the Shafe's school of law. Who was really Shams-e Tabrizi? Many sources describe him as an overpowering person of strange behavior who shocked people by his remarks and his harsh words. He claimed that he had reached the station of being the beloved, no longer the loved.

He was in his sixties when he arrived in Konya and remains the most enigmatic and powerful figure in Rumi's biography. When Shams-e Tabriz saw Rumi. He asked him a very strange question. Shams asked who was greater, Muhammad the prophet or Bayazid Bastami who was a Persian Sufi also known as Sultan-ul-Arifin", for Bastami

had said, "How great is my glory", whereas Muhammad had acknowledged in his prayer to God, "We do not know you as we should". The question Shams spoke made the learned professor faint to the ground. There are various versions of this encounter, but whatever the facts, Shams and Rumi became inseparable. Their friendship is one of the mysteries. They spent months together without any human needs, transported into a region of pure conversation. This Ecstatic connection caused difficulties in the religious community. Rumi's students felt neglected. Sensing the trouble, Shams disappeared as suddenly as he had appeared. Annemarie Schimmel who studied Rumi for many years, thinks that it was at this first disappearance that Rumi began the transformation into a mystical artist. He turned into a poet, began to listen to music, and sang, whirling around hour after hour. Other said Shams of Tabriz transformed Rumi from a learned religious teacher into devotee of music, dance, poetry and founder of whirling Dervishes.

Word came that Shams was in Damascus. Rumi sent his son, Sultan Valad to Syria to bring his friend back to Konya. When Rumi and Shams met for the second time, they fell at each other's feet, so that "no one knew who was lover and who the beloved". I would say no one knew who was mentor and who was disciple. When Rumi saw Shams again he did welcome him in a very spiritual poem. Shams stayed in Rumi's home and was married to a young girl Kymia Khatun who had been brought up in the family. Again the long mystical conversation began, and again the jealousies grew. On the night of December 5, 1248, as Rumi and Shams were talking, Shams was called to the back door. He went out, never to be seen again. Most likely, he was murdered with the connivance of Rumi's son, Allaeddin, if so Shams indeed gave his head for the privilege of mystical friendship. The mystery of the friend's absence covered Rumi's world. He himself went out searching for Shams and journeyed again to Damascus. It was there that he realized,

Why should I seek? I am the same as he. His essence speaks through me. I have been looking for myself.

Rumi's life after Shams-e Tabrizi was spent in spiritual enterprise, continuing writing and teaching, and working closely with two companions, first Salahoddin Zarkub and second Hosamoddin Calabi, to whom, successively, the practical running of the madrase (college) was given over.

Rumi's relationship with both men was intense and reciprocally respectful. One night Hosamoddin is said to have suggested to Mawlana Rumi that he compose the Masnavi, and it is addressed to him throughout as he wrote down most of it from Rumi's dictation. When Rumi heard Hosamodin's request, Rumi responded to him that, I was thinking about that and he brought a paper from corner of his turban and read it to them. It was the first 18 poems of his famous passage known as nayname, or Song of the Reed.

After the first book composed, there was a year of delay between first and the second book. After one year Rumi composed each of the remaining five books and finished them before his death..

In addition to the six books of the Masnavi, Rumi left behind Divan-e Shams of forthy thousands of lyric poem called Ghazliat or Divan-e Kabir.

The divan-e Shams is filled with ecstatic verses in which expresses his mystical love for Shams as a symbol of his love for God.

There are also three other books in Persian prose. One of them known as Fihe- Ma Fih means " In it what is in it". The second one called Majalese Sabe means Seven Sermons, survive as examples of Rumi's preaching style, and the third one was Maktobat means letters, written in a more sophisticated literary style..

As explained before, Rumi begins the Masnavi with its most famous passage, known as the nayname, or " Song of the Reed" in his authorial voice. For Rumi, this authorial voice is pivotal and frequently used. The person addressed is You, God, and you, all of humankind.

Naynaime or Song of the reed stated with listen. Why Mowlana used this word? Listen, because we as a human beings do not listen as much as we see. That is why he started with this word, Listen.

" The song of the Reed"

- 1- Listen to this reed as it is grieving ;
It tells the story of our separation
- 2- Since I was severed from the bed of reeds,
In my cry men and women have lamented.
- 3- I need the breast that's torn to shreds by parting,
to give expression to the pain of heartache.
- 4- Whoever finds himself left far from home,
looks forward to the day of his reunion.
- 5 - I was in grief in every gathering,
I joined with those of sad and happy state.
- 6- Each person thought he was my bosom friend,
but none sought out my secret from within me.
- 7- My secret is not far from my lament,
But eye and ear have no illumination.
- 8 - There's no concealment of the soul and body,
Yet no one has the power to see the soul.
- 9- The reed- flute's sound is fire, not human breath,
whoever does not have this fire, be gone.
- 10 - The fire of love is burring in the reed;
the turbulence of love is in the wine.

- 11 - The reed is friend to all who are lovelorn;
Its melodies torn our veils apart.
- 12- Whoever saw a poison and a cure,
a mate and longing lover like the reed.
- 13- The reed tells of the road that runs with blood;
it tells the tales of Majnun's passionate love
- 14- This sense is closed to all except the senseless;
and words are all the ear can ever purchase.
- 15- In all our grief the days turned into nights;
the days fell into step with daring pains.
- 16- If days are gone, say "Go! There is no fear;
and stay, O you who are uniquely holly.
17. His flood deluges all except the fish;
the day is long for him who has no bread.
- 18- The raw can't grasp the state of one who's cooked;
so this discussion must be brief- farewell.

These are the first 18 couplet-poems composed by Mowlana and he told his disciple Husamoddin that I was thinking to provide them for my followers. That was the exordium of Masnavi by Rumi. Later on the total number of the song of the reed came to 35 poems. Lets continue some of his poems about love from the song of the reed.

- Be free, my son and break your chains asunder!
How long will you be slave to gold and silver?
- If you should pour the sea into a pitcher;
how much will it contain? At best, a day's worth!
- Rejoice, O Love, that is our sweetest passion,
physician of our many illness!
- The lover is a veil, All is beloved Beloved lives, the lover is a corpse.
- How can I understand the things around me, when my companion's light is not around me.
- But Love demands that these words shall be spoken, how can a mirror be without reflection?
- Do you know why your mirror tells of nothing? The rust has not been taken from its surface.
- Reflect upon this story, my dear friends;
its meaning is the essence of our state.

Mowlana Rumi passed away on the evening of December 17, 1273 at age 66, a time traditionally known as his "wedding night" for he was now completely united with God. Some reaserchers beleieved he was at age 68. In the centuries following Rumi's death many hundreds of Dervish loges were established throughout the Ottoman domains in Turkey, Syria, and Egypt, and several Ottoman Sultans were Sufis of the Mowlavi order. His Shrine located at Konya in the south of the vast Anatolian steppe. Rumi is generally known in the west simply by the epithet Rumi which means Anatolian) or in the east as Mowlone Rumi. In Iran he known as Mowlona too. In Turkey he is universally referred to as Melvana(the Turkish spelling of Maulana)- which means' Our Master.

Translation of Mowlana Jalal-e Din Mowlavi, Rumi- (ghazal- 1393 from Divan-e Shams- Tabrizi):

I was dead, I came alive. I was tears, I became laughter.
All because of Love, when it arrived,
my temporal life, from then on changed to eternal.
Love said to me, you are not crazy enough, you don't fit this house.
So I went and became crazy, crazy enough to be in chains.
Love said you are not intoxicated enough, you don't fit the group.
So I went and got drunk, drunk enough to overflow with light-handedness.
Love said, you are still too clever filled with imagination and skepticism.
So I went and became gullible,
and in fright, pulled away from it all.
Love said, you are a candle, attracting everyone, gathering everyone around you.
Yes I am no more a candle spreading light. I gather no more crowds, and like smoke, I am all scattered now.
Love said, you are a teacher, you are a head, and for everyone you are a leader.
Yet I am no more not a teacher not a leader. Just a servant to your wishes.
Love said, you already have your own wings, I will not give more feathers.
Then my heart pulled itself apart, and filled to the brim, with a new light, overflowing with fresh life.
Now even the heavens are thankful that, because of Love. I too have become the giver of light.



IAMA ANNUAL MEETING PHOTOS





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