

NEWSLETTER





Our Reader Is Our Leader

The broad aim of this newsletter is to advance the science of neurological surgery and enhance patient's safety



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Dana Al Thukair Graphic Designer We are glad to welcome you to the third issue of the SANS Newsletter for this year.

In this issue, you will read a candid interview with Professor Ammar. We are appreciative that Professor Ammar was able to spend some time to answer some questions related to neurosurgery and the profession in general.

We are excited to introduce a new section that will be incorporated in future issues of SANS Newsletter. This section aims to enrich the Arabic content with materials written in Arabic or translated from the world's major languages that are of scientific values. By adding this new category, we hope to make our newsletter attractive not only to us but also to the public, to future patients, and to our future members. We invite various type of articles related to neurosurgery written in Arabic

In addition to this section, we also have a number of our usual columns. In our Neurosurgical Guidelines section, We want to draw your attention to the guidelines on the Acute Treatment of Cerebral Edema in Neurocritical Care Patients.

In Resident's Corner, we present an abstract co-authored by dr. Aimun Abdulhakim Jamjoom.

As always, we welcome your contributions, feedback and suggestions as we continue to improve upon our newsletter. Please click **HERE** to contact us about submitting your contribution.



We are glad to announce that SANS Newsletter will issue **Certificates of Contributions** for residents. The final decision on what gets published and who earns a certificate is with the editorial board members.

THE EXPERT'S VOICE

An Interview with A Neurosurgeon

Professor, Ahmed Ammar

We had the pleasure of interviewing a prominent neurosurgeon and Professor in Neurosurgery in Imam Abdulrahman bin Faisal University.

We are appreciative that Professor. Ahmed was able to take time out of his busy schedule to answer some questions related to neurosurgery and the profession in general. It is our pleasure to hear his perspectives on neurosurgery. Here's the interview:

SANS Newsletter (SN): What are you most proud of personally?

Ahmed Ammar (AA): I think the most important accomplishment that I am very proud of is that I was part of the system to launch the neurosurgery training programs in Saudi Arabia. I feel very happy and proud when I see that some of my trainees have built successful careers and are passing on my knowledge, teachings and values to the next generation. The chain of knowledge should continue because that is the only way nations and countries can progress. There is nothing, absolutely nothing better than investing in new generations.

(SN): Describe yourself using three words.

(AA): Visionary hard worker

(SN): What are you passionate about?

(AA): Several things indeed, especially

- a. Discovering something new, like a new invention (I have 8 patents so far and am currently working on another 2).
- b. Writing books, I love writing books and book chapters. It is a very different feeling when you write and publish because you need those papers and points for your promotion, and when you write to express your very own ideas, spread knowledge and information, and strive for a better future for people.
- C. Seeing the patient's smile and satisfaction after surgery, or seeing the mother of the child I operated on happy and asking Allah to bless me, these are feelings that are the best reward for any neurosurgeon.

(SN): How do you handle stressful situations?

(AA): This is a very important question. Our job is full of stress, it is part of the game! We should learn how to control stress. What I usually do is talk to a good friend and colleague whom I trust with his opinion.

In very stressful situations, I pray. I have found that praying has a remarkable effect in relieving stress. Sometimes I drive along the sea and sit by the sea to watch and listen to the waves.

(SN): What are you known for?

(AA): I do not know, I have never thought about that question before! My colleagues, trainees and patients call me Prof (Professor), some others call me Father, I prefer to be called Father than Prof!

(SN): Most overused phrase.

(AA): Alhamdulillah (Arabic: ٱلْحَمْدُ لِلَّهُ). Thank God; all the time, in every situation and for everything.

(SN): What was the best advice anyone ever gave you?

(AA): My father told me: do what you think is right and never wait for a reward from any person. If you do something to get a material reward, the value of what you do will be diminished. I always give this very valuable advice to my trainees and my daughters.

(SN): If you were not a neurosurgeon, what career would you choose?

(AA): Educator. Educators who establish educational programs and curricula and have a vision and mission.

(SN): How do you spend your spare time?

(AA): I wish I had free time; I divide the day into 2 periods (days) in the morning and afternoon at the hospital, then take a 40-60 minute nap and start a new day of writing, researching, revising papers, preparing for lectures or exam questions. This is my daily routine, even on weekends. People who know me know that I go to the hospital every day!

Interview with Prof. Ahmed Ammar 2/4

(SN): What's your favourite movie?

(AA): Unfortunately, I have no time to watch movies these days.

(SN): You are one of the pioneers of Neurosurgery in Saudi Arabia. What got you interested in neurosurgery?

(AA): Interesting story, but absolutely true: at the age of 13, I decided to become a neurosurgeon! The reason is that I love reading books and we had a library at home and were encouraged to buy books, so I was fascinated by Dr. Mostafa Mahmoud and read almost all of his books. His two books; (كتاب لغز الحياة) Secret of life and Secrete of death and he talked about the brain and pineal gland as the carrier of the code and secret of life and he made it clear that there are many things we do not know about the brain. His words motivated and inspired me to discover these secrets when I was a child and I decided to become a neurosurgeon and neuroscientist.

(SN): Which neurosurgeon (living or deceased) most influenced your neurosurgical career?

(AA): Definitely Professor Sugita, who died in 1994, and neurosurgeons still use the instruments he invented (Sugita clip) and his approaches. He was also a great educator and researcher. He was a humble, compassionate, honest and responsible person who cared deeply about everyone who worked with him, from the cleaners, paramedics, secretaries, trainees to his staff. He always called us "Sugita family".

(SN): We are wondering about what is your genetic background. Do you have doctors in your family? How do your children look at you as a dad and neurosurgeon?

(AA): There are many doctors in my family. My father was a judge, my younger brother, his wife and two sons are doctors, my cousin is a doctor and some others. But none of them are neurosurgeons, most are orthopedists, gynaecologists, liver surgeons, bacteriologists, I have two close relatives who were deans at two different medical schools in Egypt. My own daughters refused to go to medical school, my youngest daughter had a grade that would have allowed her to go to medical school but she refused, I tried to change her mind, she taught me a lesson and said: "You've no life!" "WE DON'T SEE YOU!"

(SN): Can you please share some of your experiences in the early days of your practice?

(AA): I began my training in neurosurgery in Karolinska Hospital Stockholm, Sweden. The chairman of the department, Professor L. Granholm, was Vice Dean of Karolinska Institute and the chairman of Noble Prize Committee on Medicine. I was the youngest, my knowledge of Swedish was not very good and I had no experience with neurosurgeons. Being in such a prestigious place motivated me to work very hard to reach the pace I have now. So my message to all younger neurosurgeons and trainees is do not be ashamed if you do not know something, ask questions, work hard, be resilient and persistent. Just do your best in everything you do. You cannot guarantee success. The only thing you can guarantee is that you do your best, the outcome is sometimes out of your hands and you have to accept that fact. Your goal is to gain wisdom. Wisdom is the greatest wealth. The strongest weapon you can have in your long endeavor is patience, do not rush into anything, The best security, guidance and help is good faith.

(SN): As a successful neurosurgeon, professor and director, how did you strike a balance among these roles and duties?

(AA): I just try to do my best, and spare neither effort nor advice. I always listen to patients, their families, trainees and colleagues. The most important impression I try to give is to convince everyone that I am not working for a personal benefit, but for everyone (patients, trainees, colleagues, students,...etc)

(SN): What was your first experience actually working on the brain surgically, and do you remember it, and what did you feel about it?

(AA): Of course I remember it very well, it was a case of chronic subdural hematoma (CSDH) who arrived on Saturday night, drunk, semi-conscious, with no orientation as to where he was and no sense of time and left hemiparesis. I was not on call, but was at the hospital. The resident on duty asked me to prepare the patient for surgery as he was busy with another case. The patient went to the OR, I called the resident and the attending, they were busy and asked me to do it. I remember well my mixed feelings between fear and joy (this event had happened only 5 months after I started my training). It went very well; I was so happy when the patient fully recovered the next day.

Interview with Prof. Ahmed Ammar 3/4

(SN): You went to study medicine in Sweden and Japan. Could you describe your journey?

(AA): It was indeed a most rewarding journey. I owe a great deal to these two places. As I mentioned, I decided at the age of 13 to become GOOD a neurosurgeon, and that decision was somehow linked to Sweden when Olivecrona came to Egypt in the late 1950s and worked there for two years. Needless to say, he made a big impression there. Olivecrona is considered the father of neurosurgery in Europe! So I decided to go to Karolinska Hospital. I saw him, but he was ill and died a month after I arrived, and I found Prof. Leksell, who had invented the gamma knife and the stereotactic frame and was the first to use the US technique in the brain. Then I discovered that the chairman of my department was the president of the Nobel Prize committee. Therefore, I attended the Nobel Prize ceremony twice. I was very lucky to be in such a place. Then Prof. Sugita visited Karolinska and stayed with us for a week to lecture and operate, and I saw a different level of microvascular neurosurgery. So I decided to join Prof. Sugita in Japan, where I met many trainees from the US, Canada, Europe and Asia! He has an international department. I think my 4 years in Japan were the most important 4 years in my life that shaped my personality. I learned not only neurosurgery, but also the good values and ethics of patient care, working as a team, modesty and humility, and that you must always give your best to your patients because the patient comes first! I remember Sugita used to say, "Do not hide information in your head, but pass it on to your colleagues and trainees. Withheld information dies and can destroy the reputation of the person who has it. If you share information, that information will be processed and grow, and your name will always shine." I was the first non-Japanese to qualify in neurosurgery in Japan, and I may have made some new advances in tissue and cell culture at my farewell party. Prof Sugita brought a square plate and asked me to put my hand deep into it. I did not, why should I! Two days later and just before I left, Prof. Sugita and Kobayashi approached me from the office to see my handprint on the outside wall of the Department of Neurosurgery, Shinshu University. It is still there, since 1984, and I am so proud of it, more than any other certificate or award I have ever received (see pictures below).

(SN): Describe the biggest issue you see challenging your practice?

(AA): If you mean the practice of a neurosurgeon, the unpredictable outcome is the biggest challenge for all neurosurgeons everywhere. The outcome of neurosurgical problems needs to be improved. Unfortunately, surgical techniques will never be able to do this. The answer lies in advances in neuroscience research. We need to learn how to protect, repair, and restore damaged neurones. This progress will take place in research laboratories.

(SN): What is the majority of your surgical practice?

(AA): I operated in Saudi Arabia almost 7000 cases almost everything, vascular, we were the first to operate ACOM aneurysm in 1987 (2 cases) in Saudi Arabia, tumours, spine, epilepsy, peripheral nerves, paediatric and trauma of course, in the last 30 years of practice in Saudi Arabia, I can divide my practice into 3 phases:

Phase I (1987-1999): most of my cases were spine, then paediatric neurosurgery

Phase II (2002 - 2008): most cases were spine, then brain tumours.

The last phase (2008 to present): paediatric cases are the absolute majority.

(SN): Do you have a specific case that sticks with you?

(AA): There are several cases, but the case I remember now is a family; grandmother and mother, granddaughter, and two other women in that family, all of whom I operated on to remove cavernous angiomas. The family considered me a member of their family, they called me anytime to inquire about medical issues, e.g. COVID 19 vaccination or cold. I never refused their calls and answered them. The relationship between patient and doctor is very important and should be respected and nurtured.

(SN): How do you feel about taking responsibility for choices that you know will profoundly affect your patient's life?

(AA): This is the greatest responsibility a man can assume. I must respect this responsibility and do my best to live up to it and respect the patient and his/her family and consider them as partners in the joint decision! I have, as I said, operated on over 7000 cases in 34 years, some have had severe complications and some have sadly passed away, but I have never been sued by a patient or their family. I think my best insurance is to build a good relationship with patients and their families before surgery.

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Interview with Prof. Ahmed Ammar 4/4

SN): Upon the occasion of the 9th Annual Meeting of the Saudi Association of Neurological Surgery in 2015, the SANS Medal was awarded to You. Could you tell us more about it?

(AA): This was a big surprise for me because I was one of the organisers of such a meeting and we decided to award the first medal to Professor Zain Al Abdeen Jamjoom. Professor Abdulrahman Al-Anazi and the board of SANS decided to give the award to me as well. This was a big surprise which I did not expect at that time.

(SN): What future do you envision in neurosurgery?

(AA): I think we will have less incisions, more radiological procedures, radiation, genetic modification, chemotherapy, rewiring of the brain and microchips in the brain.

(SN): What is important in neurosurgical training?

(AA): We live in a very special era where information, communication and robotic technology has advanced and revolutionised at an unprecedented pace. This advancement is likely to have an impact on neurosurgical practise. Educators and trainers must be aware of this and have the foresight to prepare trainees for an unknown future, to deal with technologies that are not available today, and to apply surgical techniques that are unfamiliar to them. To prepare them for an unknown future, we should teach them the true values and ethics of commitment to the patient and loyalty to the place where you work, as well as working in a team. Metacognition should be taught to trainees as this will be their weapon in the face of an uncertain future.

(SN): What advice would you give to students who aspire to be in neurosurgery?

(AA): I advise anyone who approaches me (I was a career counsellor at my university for many years) to think twice before choosing neurosurgery. It is a difficult and demanding field. You have to be on your toes most of the time. When you take on this challenge, you have to adhere to good ethics and values, be sincere, give your all to your patients, and always remember that the patient is the centre of care. You work for the patient, not for yourself or anyone else.

(SN): Is there anything you can tell us that might surprise people reading the article?

(AA): Thank you so much for this intelligent interview; I truly appreciate and value your questions. I would like to express my gratitude to everyone I have met during my time in Saudi Arabia. I thank my patients and their families, my trainees and I want them to know how proud I am of them all, my colleagues, nurses and paramedics; I love them all and will always remember my best days with them. I believe it is time for me to leave and start a new chapter in my career elsewhere (not necessarily in neurosurgery, but it could be in education and neuroscience).

My last year working here will be in 2022!



Dr. Ahmed Ammar is a Professor and Consultant Neurosurgeon, Imam Abdulrahman Bin Faisal University, and King Fahd Hospital of the University. Professor Ahmed Started Neurosurgical Training in Karolinska Institute, Sweden and Shinshu University, Japan. He moved to Saudi Arabia since 1987 and shared in writing the First Fellowship program in Neurosurgery in Saudi Arabia which was launched at the end of 1987.

Interview with Prof. Ahmed Ammar 4/4



My hand print has been on the outside wall of Shinshu University since 1984, and it is still there.



Professor Sugita is operating, Professor Kobayash as the first assistant and I as the second assistant.



In 1979, in the office of Professor L. Leksell. In the background of the photo is the very first Leksell Stereotactic frame, which used on patients in 1949



The first meeting of the first board of the Saudi Association for Neurological Surgery (SANS)

Front row: Professor Ahmed Al Khani, Professor Amro Al-Habib (President), Professor Zain Al Abdeen Jamjoom, Professor Abdulrahman Al-Anazi

Second row: Dr. Abdulrahman Sabbagh, Dr. Ali Bin Salama, Dr. Faisal Al Otaibi, Professor Ahmed Ammar, Dr. Essam Al Shail



The current consultants and Faculty staff of the Department of Neurosurgery, Imam Bin Faisal University, King Fahd University Hospital

NEUROSURGICAL GUIDELINES

GUIDELINES FOR THE ACUTE TREATMENT OF CEREBRAL EDEMA IN NEUROCRITICAL CARE PATIENTS

By Dr. Yaser Babgi

King Fahad Medical City | KFMC Riyadh, Saudi Arabia

Cerebral edema is a secondary pathology for a different condition or disease entity. It can be focal or diffuse, and it can be intracellular or extracellular. The presence of cerebral edema can be associated with a poor prognosis, making understanding and acute treatment very important in neurosurgical practice. There are several ways to treat cerebral edema, ranging from temperature and fluid to craniectomy and coma. This guideline examines the effects of steroids

hyperosmolar agents such as mannitol or hypertonic saline, and non-pharmacological modalities.

The Neurocritical Care Society has released these guidlines. They have classified the recommendations as strong when they state "We recommend", the less strong recommendations they use the less strong word "We suggest", and when there is insufficient evidence they use "Statements of good practice".

Treatment of Cerebral Edema in Patients with Subarachnoid Hemorrhage

Q: Does sodium target-based dosing with hypertonic sodium solutions (sodium chloride, lactate, or bicarbonate) improve ICP/cerebral edema and improve neurological outcomes at discharge compared to intermittent, symptom-based bolus doses of hypertonic sodium solutions?

Recommendations

1. We suggest using symptom-based bolus dosing of hypertonic sodium solutions

- rather than sodium target-based dosing for the management of ICP or cerebral edema in patients with SAH (conditional recommendation, very low-quality evidence).
- 2. Due to insufficient evidence, we cannot recommend a specific dosing strategy for HTS to improve neurological outcomes in patients with SAH.

Treatment of Cerebral Edema in Patients with Traumatic Brain Injury

Q: Does the use of hypertonic sodium solutions improve cerebral edema and neurological outcomes compared to mannitol?

Recommendations

- We suggest using hypertonic sodium solutions over mannitol for the initial management of elevated ICP or cerebral edema in patients with TBI (conditional recommendation, lowquality evidence).
- 2. We suggest that neither HTS nor mannitol be used with the expectation for improving neurological outcomes in patients with TBI (conditional

- recommendation, low-quality evidence).
- 3. We suggest that the use of mannitol is an effective alternative in patients with TBI unable to receive hypertonic sodium solutions (conditional recommendation, low-quality evidence).
- 4. We recommend against the use of hypertonic sodium solutions in the pre-hospital setting to specifically improve neurological outcomes for patients with TBI (strong recommendation, moderate-quality evidence).
- 5. We suggest against the use of mannitol in the pre-hospital setting to improve neurological outcomes for patients with TBI (conditional recommendation, very low-quality evidence).

Treatment of Cerebral Edema in Patients with Acute Ischemic Stroke

Q: Does the use of hypertonic sodium solutions improve cerebral edema and neurological outcomes compared to mannitol?

Recommendations

- We suggest using either hypertonic sodium solutions or mannitol for the initial management of ICP or cerebral edema in patients with acute ischemic stroke (conditional recommendation, low-quality evidence).
- 2. There is insufficient evidence to recommend either hypertonic saline

- or mannitol for improving neurological outcomes in patients with acute ischemic stroke.
- 3. We suggest that clinicians consider administration of hypertonic sodium solutions for management of ICP or cerebral edema in patients with acute ischemic stroke who do not have an adequate response to mannitol (conditional recommendation, low-quality evidence).
- 4. We suggest against the use of prophylactic scheduled mannitol in acute ischemic stroke due to the potential for harm (conditional recommendation, low-quality evidence).

Neurosurgical Guidelines

Treatment of Cerebral Edema in Patients with Intracerebral Hemorrhage

Q: Does the use of hypertonic sodium solutions improve cerebral edema compared to mannitol?

Q: Does the use of corticosteroid therapy improve neurological outcomes compared to placebo/control?

Recommendations

 We suggest using hypertonic sodium solutions over mannitol for the management of ICP or cerebral edema in patients with intracerebral hemorrhage (conditional recommendation, very low-quality evidence).

- 2. We suggest that either symptombased bolus dosing or using a targeted sodium concentration is appropriate hypertonic sodium solution administration strategy for the management of elevated ICP or cerebral edema in patients with intracerebral hemorrhage (conditional recommendation, very low-quality evidence).
- 3. We recommend against the use of corticosteroids to improve neurological outcomes in patients with intracerebral hemorrhage due to the potential for increased mortality and infectious complications (strong recommendation, moderate-quality evidence).

Treatment of Cerebral Edema in Patients with Intracerebral Hemorrhage

Q: Does the use of hypertonic sodium solutions improve cerebral edema compared to mannitol?

Q: Does the use of corticosteroid therapy improve neurological outcomes compared to placebo/control?

Recommendations

 We suggest using hypertonic sodium solutions over mannitol for the management of ICP or cerebral edema in patients with intracerebral hemorrhage (conditional recommendation, very low-quality evidence).

- 2. We suggest that either symptombased bolus dosing or using a targeted sodium concentration is appropriate hypertonic sodium solution administration strategy for the management of elevated ICP or cerebral edema in patients with intracerebral hemorrhage (conditional recommendation, very low-quality evidence).
- We recommend against the use of corticosteroids to improve neurological outcomes in patients with intracerebral hemorrhage due to the potential for increased mortality and infectious complications (strong recommendation, moderate-quality evidence).

Neurosurgical Guidelines

Treatment of Cerebral Edema in Patients with Bacterial Meningitis

Q: Does the use of hypertonic sodium solutions improve cerebral edema compared to mannitol?

Q: Does the use of corticosteroid therapy improve neurological outcomes compared to placebo/control?

Recommendations

- 1. There is insufficient evidence to determine whether hypertonic sodium solutions or mannitol is more effective to reduce ICP or cerebral edema in patients with community-acquired bacterial meningitis.
- 2. We recommend dexamethasone 10 mg intravenous every 6 h for 4 days to reduce neurological sequelae (primarily hearing loss) in patients with community-acquired bacterial meningitis (strong recommendation, moderate-quality evidence).

- 3. We suggest dexamethasone
 0.15 mg/kg intravenous every 6 h for
 4 days as an alternative dose for
 patients with low body weight or high
 risk of corticosteroid adverse effects
 (good practice statement).
- 4. We recommend administering dexamethasone before or with the first dose of antibiotic in patients with bacterial meningitis (strong recommendation, moderate-quality evidence).
- 5. We recommend using corticosteroids to reduce mortality in patients with tuberculosis meningitis (strong recommendation, moderate quality of evidence). We cannot make a recommendation for one specific corticosteroid or dose in patients with TB meningitis due to the inconsistency of agents and doses evaluated in the literature.
- 6. We suggest that treatment with corticosteroids should be continued for two or more weeks in patients with tuberculosis meningitis (conditional recommendation, low quality of evidence).

Non-pharmacologic Treatment of Cerebral Edema and Elevated Intracranial Pressure

Recommendations

1. We suggest that elevating the head of the bed to 30 degrees (but no greater than 45 degrees) be used as a beneficial adjunct to reduce intracranial pressure (conditional recommendation, very low-quality evidence).

- 2. We recommend that brief episodes of hyperventilation can be used for patients with acute elevations in intracranial pressure (strong recommendation, very low-quality evidence).
- 3. We suggest that the use of CSF diversion be considered as a beneficial adjunct to reduce intracranial pressure (conditional recommendation, very low-quality evidence).

Neurosurgical Guidelines

4. While non-pharmacological interventions may be effective for acute elevations in intracranial pressure, there is insufficient evidence that non-pharmacological interventions are effective for the treatment of any specific physiological changes that produce brain swelling related to cerebral edema.

Hyperosmolar Therapy Safety and Infusion Considerations

Recommendations for Assessing the Risk of Toxicity (Acute Kidney Injury or Unwanted Acidosis) After Hypertonic Sodium Solution Administration and Mannitol Administration

- We suggest using osmolar gap over serum osmolarity thresholds during treatment with mannitol to monitor for the risk of AKI (conditional recommendation, very low-quality evidence).
- 2. There is insufficient evidence to recommend a cutoff value for osmolar gap when evaluating for the risk of acute kidney injury.
- 3. Renal function measures should be monitored closely in patients receiving mannitol due to the risk of AKI with hyperosmolar therapy (good practice statement).
- 4. We suggest that severe hypernatremia and hyperchloremia during treatment with hypertonic

- sodium solutions should be avoided due to the association with acute kidney injury (conditional recommendation, low-quality evidence). An upper serum sodium range of 155-160 mEq/L and a serum chloride range of 110-115 mEq/L may be reasonable to decrease the risk of acute kidney injury (conditional recommendation, very low-quality evidence).
- Clinicians should routinely monitor both sodium and chloride serum concentrations to assess the risk of AKI related to elevated concentrations (good practice statement).
- 6. Renal function should be monitored closely in patients receiving hypertonic sodium solutions due to the risk of AKI with hyperosmolar therapy (good practice statement).
- 7. Clinicians should avoid hyponatremia in patients with severe neurological injury due to the risk of exacerbating cerebral edema (good practice statement).

Reference

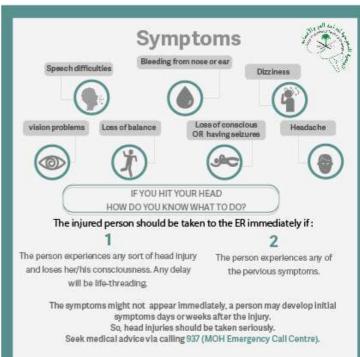
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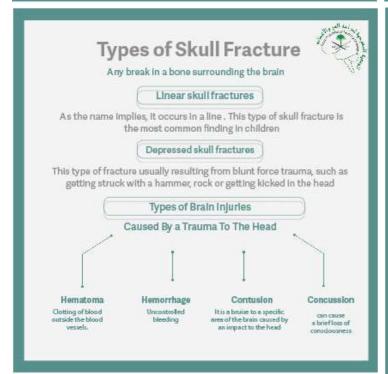


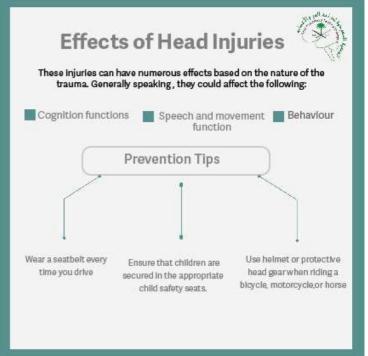
PUBLIC EDUCATION

HEAD INJURY









PUBLIC EDUCATION

إصابات الرأس











THE ARABIC CORNER

عرق النسا

مقالة في بيان هذا العرض ومسبباته وبعض طرق علاجه

كُتب بواسطة: الدكتور محمد مسفر الشردان جامعة أوتاوا



ما هو عرق النسا ؟

هو عبارة عن ألم يكون ممتدًا من أسفل الظهر إلى ما تحت الركبة وغالبا يصل الألم إلى أخمص القدم. الألم هذا غالبا ما يكون ألم كهربائي، أو كالطعنات، وقد يكون مصاحبًا لألم في الظهر أو يأتي بعد ألم في أسفل الظهر، وقد يصاحبه ضعف في القدم أو مشاكل في التبول أو التبرز، فهو كما ترى عارض له مسببات مختلفة.

وعندما نقول عرض أو عارض فنحن نقصد الأشياء التي يشعر بها المريض. فالكحة مثلا عارض وقد تدل على وجود حساسية، او التهاب في الصدر او غيرهما، ويجب القيام بفحوصات أكثر حتى نعرف ما هو مسبب عارض الكحة.

بما أن عرق النسا هو عارض فقد تختلف

مسبباته، وقد يكون ناتجًا عن

أحد هذه الأسباب:

الانزلاق الغضروفي (الديسك)

وهو السبب في ٩٠٪ من الحالات

- ٢. تضيق القناة العصبية
 - الانزلاق الفقاري
- أورام العمود الفقري

أول خطوة لعلاج أي مرض هي محاولة منع هذا المرض من الحدوث، وكما قيل "الوقاية خير من العلاج". فهناك أمور يمكن تفاديها تساعد - بإذن الله - في الحماية من الانزلاق الغضروفي (الديسك) ومن هذه الأمور الوقائية ما يلي:

- ١. الامتناع عن التدخين
 - ٢. تجنب زيادة الوزن
- ٣. المحافظة على الرياضة خصوصا الرياضات
 التى تقوي عضلات الظهر والبطن.

وهذا بالضرورة لا يعني أن المتجنب لهذه المخاطر لن يحدث له انزلاق غضروفي، لكن نسبة اصابته بالانزلاق الغضروفي أقل من غيره.

إذا شعر الفرد بألم عرق النسا فنحن نوصي بمراجعة طبيب العائلة لمعرفة مسببات العرَض ولكي يتم إعطاء المريض العلاج المناسب.

التشخيص:

عند مراجعة الطبيب أو الطبيبة سيقوم الطبيب/بة بأخذ التاريخ المرضي ليعرف متى بدأت الأعراض وفي حال كان هناك أعراض أخرى مصاحبة. كذلك يتوجب على الطبيب/بة إجراء فحص سريري لقياس حركة العضلات في الرجلين والظهر وقد يتضمن ذلك الفحص على المثانة أو منطقة الحوض.

أما الفحوصات التي يجب عملها فهي غالباً ما تشمل طلب أشعة مغناطيسية لمنطقة الفقرات القطنية، وفي حالات معينة يتم طلب أشعة مقطعية كذلك.

العلاج:

العلاج يعتمد كثيرًا على المسبب، لكن على افتراض أن السبب هو الانزلاق الغضروفي، فإن العلاج يكون على عدة مراحل:

- المرحلة الأولى: هذه المرحلة لمدة يوم أو يومين فقط ويكون العلاج هنا بالراحة وبعض المسكنات
 - المرحلة الثانية: العلاج الطبيعي لتقوية عضلات أسفل الظهر مع إعطاء مسكنات للآلام العصبية وقرابة ١٠-٨٠٪ من المرضى يتم علاجهم بهذه الطريقة وليس هناك حاجة لأي تدخل آخر. تستمر هذه المرحلة لمدة تترواح ما بين الشهرين إلى ثلاثة أشهر.
 - المرحلة الثالثة: التدخل الجراحي وهو إجراء جراحي يقوم فيه جراح العمود الفقري بازالة الغضروف (الديسك) الضاغط على العصب.

حالات خاصة:

في حالة شعور المريض بضعف في القدم، احتباس في البول، او عدم القدرة على افراغ المثانة، أو الشعور بخدر في منطقة الحوض، يجب التوجه للطوارئ مباشرة اذ ان الانتظار سيؤدي الى ضرر دائم في هذه الأعصاب وقد لا تستعيد طبيعتها أبدًا.

BOOK NEWS





هذا الكتاب

بفضل الله ومنه وتوفيقه، تمت طباعة و نشر كتاب أمراض الأوعية الدموية العصبية للدكتور عبد الرحمن بن يعقوب التركي.

يعد هذا الكتاب من الأول من نوعه في المكتبة العربية لكونه مرجعاً مناسباً لمختلف فئات المجتمع.

وبدورنا نتقدم للدكتور عبدالرحمن التركي بوافر الشكر والامتنان على مجهوداته لإثراء المحتوى العربي و تسهيل الوصول للمعلومات المحققة عن أمراض الأوعية الدموية العصبية من خلال تأليف الكتاب ، والتي تسهم في ردم الهوة المعرفية لغير المختصين في المجال.

يمكنك طلب الكتاب من موقع جرير الالكتروني. بادر باقتناء نسختك من خلال الرابط التالي هنا

كما يسعدنا إبلاغكم عن توافر الكتاب في كافة فروع مكتبة جرير.

نبذة عن الكتاب

كتب بواسطة الدكتور محمد سعيد بافقيه

استشاري جراحة مخ و أعصاب, جراحة قاع الجمجمة و الأوعية الدموية العصبية المركز الوطني للعلوم العصبية - مدينة الملك فهد الطبية

استقبلت ببالغ السعادة إهداء نفيسا ،من صديقي العزيز سعادة الدكتور(عبدالرحمن بن يعقوب التركي) كتابه الأول في التثقيف الصحي عن (أمراض الأوعية الدموية العصبية). يعد هذا الكتاب الأول من نوعه في المكتبة العربية ,اذا ما استثنيت الكتب المترجمة, الذي يحمل صبغة تثقيفية عميقة في تخصص دقيق من تخصصات جراحة المخ و الاعصاب.

يبحر الدكتور عبدالرحمن من خلال كتابه و صفحاته ال 120 و أبوابه الأربعة بالقارئ العربي في أمواج المعلومات ؛ ليثبت منها الصحيح ، ويمحو عنها العقيم الخاطئ ،ثم يقوم بتحويل المعلومات العامة الكثيفة إلى علم مقنن في خمسة عشر فصلا، يتناول في . أخره التطبيقات السريرية للطبيب المعالج

تأتي مقدمة الكتاب؛ لتحمل مجموعة أفكار أشبه بـ (البوح) أو الفضفضة مع المجتمع و الرغبة في تصحيح مفهوم استقاء المعلومة من مصدرها الدقيق و منبعها النقي الصحيح؛ ذاك لكثرة النشر الخاطئ للمعلومات في الإعلام البديل، و وسائل التواصل الاجتماعي. و يحذر الدكتور عبدالرحمن تحديدا من قادة الطب العشوائي ممن بني علمهم على غير أساس أو برهان, و الطرح العشوائي لوسائط ذات المحتوى الجمالي في ظاهره لكنه استغلالي في باطنه وأسلوبه

حجم الكتاب صغيرا في عدد صفحاته مقارنة بسعة معلوماته مع التدعيم الجمالي بالصور و الشروحات عالية الجودة، والتي قامت برسمها الطبيبة المتميزة _الطبيبة المقيمة_ فاطمة عبدالرحيم الغبان, مما أضفى للكتاب جمالية، و جاذبية من خلال الصوروالتي فااقت الخمسين صورة وكذلك االرسم البياني.

تناول الباب الأول للكتاب مقدمة لطيفة لتشريح الجهاز العصبي و أقسامه الثلاثة, و رغم ما يعرف عن صعوبة فهم المعلومات التشريحية إلا أن سلاسة و سهولة الطرح يعطي فرصة كبيرة للفهم السريع للمعلومة. ومن خلال هذا الباب أكد الدكتور عبدالرحمن على أهمية فهم بعض المصطلحات العلمية و التشريحية الضرورية؛ لفهم تراكمية المعلومات التطبيقية و الأمراض المصاحبة لاحقا، و بتدرج لطيف يتعمق الكاتب في النظم التشريحية،

لينتقل القارئ في الفصل الثاني من هذا الباب إلى الصنعة العميقة لخلقة البارئ سبحانه في التنظيم التشريحية للأوعية الدموية الدماغية، مبينا من خلال هذا الفصل الدورة الدموية الدماغية بقسميها الأمامي، و الخلفي و تداخلهما الداعم، و المعزز للوصول المعقد للدم لكامل أجزاء الدماغ فيما يعرف بالتروية الدموية للدماغ، و لأكمال الأسس المهمة لفهم أمراض الأوعية الدموية للدماغ يعرج الكاتب على أهم الاختبارات و أنواع وسائل التشخيص السريري مركزا على الأشعة الصوتية, و التصوير المقطعي الطبقي, و تصوير الرنين المغنطيسي و أخيرا و الأهم الطريقة المباشرة لتصوير الأوعية الدموية الدماغية القسط".

بعد المقدمة المهمة في الباب الأول ينتقل بنا الكتاب إلى مبحث مهم و رئيس بتناوله لأمراض الأوعية الدموية الدماغية مقسمة إلى أمراض الجلطة الدماغية و ما يصحبها من أمراض في الباب الثاني، و أمراض نزيف الدماغ بصوره المتعددة في الباب الثالث. في هذا المبحث طرح موسع يستطيع من خلاله الباحث عن المعلومة التثقيفية اختيار المرض و من ثم قراءة ما يحتاج إليه لمساعدته في الفهم الأمثل للمرض؛ رجااءالوصول إلى التعامل الأمثل مع هذه الأمراض، و من ثم الشفاء بقدرة الله.

المبحث الأخير للكتاب قدم نبذة قصيرة و مقننة لسبل التدخل الجراحي لأمراض الأوعية الدموية الدماغية بفرعيه الجراحة المفتوحة، و جراحة الأشعة التداخلية. مع الحرص على إيضاح المتطلبات المتعددة لهذه التدخلات الجراحية.

من وجهة نظر ناقدة فقد ناقش الكاتب الأفكار المركزية المهمة المتعلقة بأمراض الأوعية الدموية من خلال طرح مبسط و سلس معززا بالشروحات و الرسومات البيانية بدون تكلف منطلقا من منهج الرغبة في تصحيح مفاهم خاطئة.

أخيرا اتقدم بالتهنئة للدكتور (عبدالرحمن التركي) لتحمله المسؤولية و باكورة إنتاجه في اثراء المكتبة العربية بعمل ثقافي نحن و المرضىي و عوائلهم في أمس الحاجة إليه, و أسئل المولى أن يجزيه خيرا و أرجو له مزيدا من التقدم و النجاح والاستمرار في انتاج حضاري ذي جودة عالية.

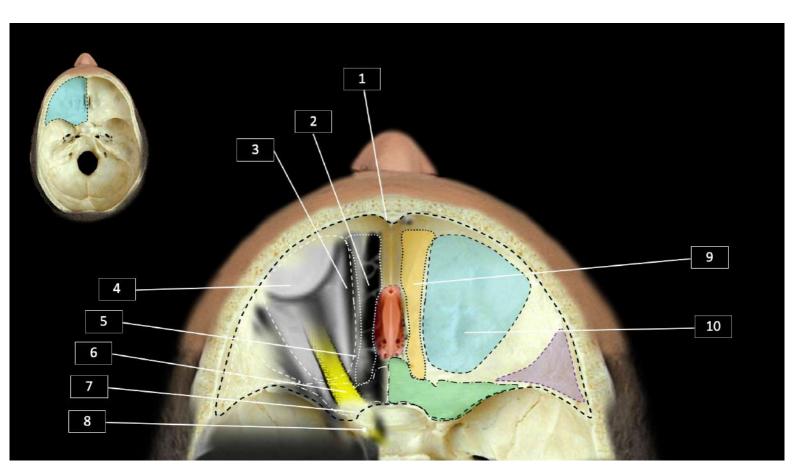
CLINICAL CHALLENGE



By Dr. Mohammed BafaquhKing Fahad Medical City | KFMC
Riyadh

ANATOMY CHALLENGE

Name the following areas?



RESIDENT'S CORNER

Neurosurgy 2021 Jan 29;1-9.

doi: 10.3171/2020.8.JNS20321. Online ahead of print.

Utility of image-guided external ventriculostomy: analysis of contemporary practice in the United Kingdom and Ireland

Aaron Lawson McLean ¹, Aimun A B Jamjoom ², Michael T C Poon ³, Difei Wang ⁴, Isaac Phang ⁵, Mohamed Okasha ⁶, Matthew Boissaud-Cooke ⁷, Adam P Williams ⁸, Aminul I Ahmed ⁹, British Neurosurgical Trainee Research Collaborative

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- ²2Department of Clinical Neuroscience, Western General Hospital, NHS Lothian, Edinburgh.
- ³3Usher Institute, University of Edinburgh.
- ⁴4Department of Neurosurgery, Wessex Neurological Centre, Southampton General Hospital, University Hospital Southampton NHS Foundation Trust, Southampton.
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- 66Department of Neurosurgery, Royal Victoria Infirmary, Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne.
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- 88Department of Neurosurgery, Southmead Hospital, North Bristol NHS Trust, Bristol; and.
- 99Department of Neurosurgery, National Hospital for Neurology and Neurosurgery, University College London Hospitals NHS Foundation Trust, London, United Kingdom.

Abstract

Objective: Freehand external ventricular drain (EVD) insertion is associated with a high rate of catheter misplacement. Image-guided EVD placement with neuronavigation or ultrasound has been proposed as a safer, more accurate alternative with potential to facilitate proper placement and reduce catheter malfunction risk. This study aimed to determine the impact of image-guided EVD placement on catheter tip position and drain functionality.

Methods: This study is a secondary analysis of a data set from a prospective, multicenter study. Data were collated for EVD placements undertaken in the United Kingdom and Ireland from November 2014 to April 2015. In total, 21 large tertiary care academic medical centers were included.

Results: Over the study period, 632 EVDs were inserted and 65.9% had tips lying free-floating in the CSF. Only 19.6% of insertions took place under image guidance. The use of image guidance did not significantly improve the position of the catheter tip on postoperative imaging, even when stratified by ventricular size. There was also no association between navigation use and drain blockage.

Conclusions: Image-guided EVD placement was not associated with an increased likelihood of achieving optimal catheter position or with a lower rate of catheter blockage. Educational efforts should aim to enhance surgeons' ability to apply the technique correctly in cases of disturbed cerebral anatomy or small ventricles to reduce procedural risks and facilitate effective catheter positioning.



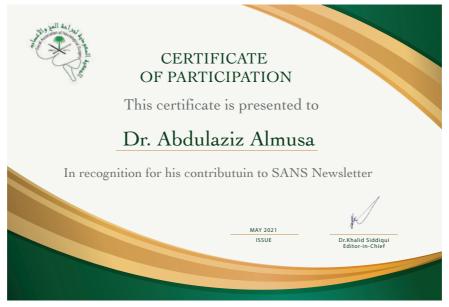
RESIDENT'S CORNER

CERTIFICATES OF PARTICIPATION

For Residents

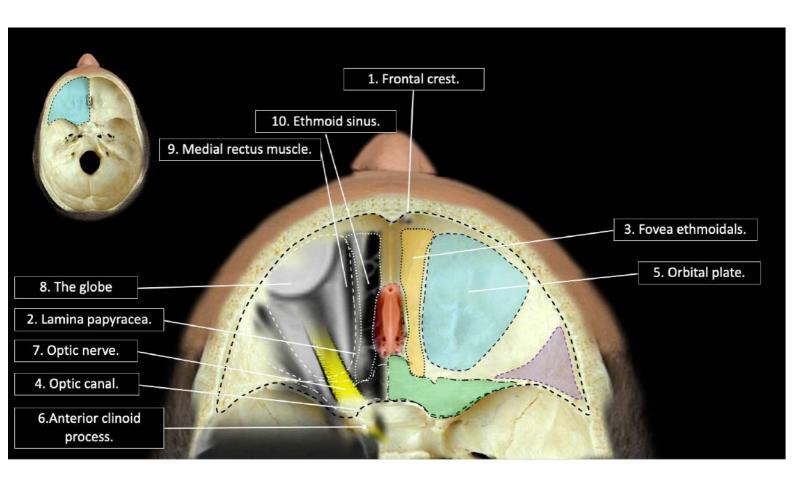
Our editorial board members have issued Certificates of Contributions for residents, who contributed to our newsletter in May 2021 issue.





CLINICAL CHALLENGE

The Answer



NEUROSURGERY COMMUNITY

WELCOMING NEW RESIDENTS

We are pleased to announce the addition of 28 residents to our Neurosurgery Residency Program supervised by the Saudi Commission for Health Specialties (SCFHS). We look forward to the new group of R1 joining us in October and welcome them to our program!

Congratulations to them and we look forward to continuing our commitment to education with these new residents.

We are proud to announce them:

1. Faisal Ali AlHabib	10.Nada Thwab AlNaifai	19.Raghad Zead AlJohani
2. Majid Abdullah ALOmair	11.Nouf Ibrahim AlAnizi	20.Ibrahim Hamad Arawi
3. Ameerah Mohammad	12.Salm Khalid Ba'ashin	21.Omar Khalid Mansi
AlOlyani	13.Sultan Suliman AlRshoud	22.Fayaz Dhafir AlShehri
4. Ahoud Abdulkarim AlHarbi	14.Mody Abdulrahman	23.Sarah Tariq Pandah
5. Abdullah Khalid AlBathi	AlHusainian	24.Abdulrahman Marzooq
6. Ahmed Hamzah AlMakrmi	15.Abdullah Abdulrahman	AlMutairi
7. Linah Abdullah AlShehri	AlTwaim	25.Ziad Aydha AlZahrani
8. Abdullah Mohammad	16.Nawaf Fasial AlMoqabial	26.Sarah Abdullah AlQarni
AlOtiabi	17.Omar Abdulaziz AlWhaibi	27.Abdulrahman Abdullah
9. Raghad Mohammad	18.Abdulrahman Dhaif Allah	AlShamrani
AlTwaijairi	AlOfi	28.Murshid Hamad AlYami

You, our future neurosurgeons, will begin the journey and will embark many years of training to make you into life-saving physicians.

Please do remember:

You know so much. You know nothing at all. Keep these two ideas in constant tension, and develop your own style.

Welcome New Residents, Watch Where You Step!

NEUROSURGERY COMMUNITY

Welcoming New Neurosurgeon, Dr. Naif Alotaibi!



We would like to extend a warm welcome to Dr. Naif AlOtaibi, who has joined Adult Neurosurgery Department as part of his fellowship as a Subspecialty Consultant.

Dr. AlOtaibi received his MBBS with honours from King Saud University in 2010 and completed his residency in Neurosurgery at the University of Toronto in 2019. He is a Fellow of the Royal College of Physicians and Surgeons of Canada in Neurosurgery. In June 2021, he earned his two-year fellowship in Endovascular Neurosurgery at

Massachusetts General Hospital/Harvard Medical School, Boston USA under the mentorship of Dr. Aman B. Patel.

Dr. AlOtaibi also graduated from Surgeon-Scientist Program in Toronto and earned an MSc degree in clinical sciences. He has published more than 80 peer-reviewed articles and has served as a reviewer for several journals, including Stroke, Neurosurgery, Journal of NeuroInterventional Surgery, Spine, and World Neurosurgery.

His clinical and research activities at National Neuroscience Institute (NNI) focus on neurovascular management of cerebral aneurysms, stroke, AVM, DAVF, venous stenosis in pseudotumor cerebri (IIH), atherosclerotic extracranial/intracranial stenosis, spinal vascular/neoplastic lesions, and pathologies of the head and neck (facial AVMs, venolymphatic malformations, idiopathic epistaxis and tumours).

We are all very proud to have Dr. Alotaibi on our National Neuroscience Institute team.

Welcome Dr. Naif!



CALMING WORDS IN THE MIDST OF THE STORM

A poem about COVID-19

By Roba Mohammed Bafaquh

Slowly and steadily my eyes dance to sleep Striding from a nightmare to a peaceful dream

Faster and louder my heart skips a beat A fish above water reaching for air to breathe

Conscious of my surroundings a plover in need A crocodiles act in a magical tale I seek

Slower and unstable my eyes wake to plead, Deluded by lies running away in fear

Standing strong being thankful for my beliefs With a brighter mind we'll get over this disease

OBITUARY



By Dr. Fahd Derkaoui Hassani

Vice President of the Moroccan Society of Neurosurgery

By Professor Najia El Abbadi

President of the Pan Arab Neurosurgical Society



Professor Souad Bakhti

1965-2021

August 4, 2021, Arab, African, Maghrebi, French-speaking, Mediterranean, and world neurosurgery has lost one of today's leaders in neurosurgery, Professor Souad Bakhti, President of Algerian Society of Neurosurgery.

Born in Algiers in 1965, she had an illustrious career, becoming the first female head of the Department of Neurosurgery in Algeria at the Ali Ait Idir Hospital in Algiers and the first female president of the Algerian Society of Neurosurgery.

Well-known paediatric neurosurgeon, very active at national and international level, Professor Souad Bakhti was appointed in several positions:

- Chairman of the WFNS Women In Neurosurgery Committee Since 2019
- President of the Algerian Society of .Neurosurgery since 2014
- Secretary of the Pan Arab Neurosurgical Society Since 2018

- Vice President to North Africa of the Continental Association of African Neurosurgical Societies since 2012.
- Founder and Past President of the Mediterranean Association of Neurological Surgeons 2015-2017.

Today, world of neurosurgery has lost one of its pillars. Professor Souad Bakhti was a devoted neurosurgeon and loyal friend, a mentor to many neurosurgeons, and a great sister and friend to even more colleagues.

We have lost a member of our great family of neurosurgeons.

May the great God accept her into his holy mercy. Our sincere condolences to her husband Dr. Abdenour, her daughter Lilia and her family.

Our condolences to our colleagues neurosurgeons at Algerian Society of Neurosurgery.



OBITUARY



CONDOLENCES FROM SANS



Professor Amro Al-Habib



Doctor Hosam Al-Jehani



It is with a deep sadness that we received the news of the passing of Dr. Souad Bakhti, the President of the Algerian Society of Neurosurgery.

We have known her as a dynamic and vibrant person who was kind to those

around her. She was integral to the advancement of neurosurgery in her country and the region.

We offer our heartfelt condolences to her family, friends, all members of her society and the neurosurgical community at large. Praying for her to rest in paradise.

OBITUARY



By Dr. Saggaf AlSaggaf By Dr. Abdulrahman Sabbagh



Dr. Fouad Abdulaziz Burdi

Some of you may not know this good man, Dr. Fouad Abdulaziz al-Bardi.

He has the virtue of God in the success of the brain and neurosurgery conferences that have taken place in the western region at various levels over the past years.

Dr. Fouad Abdulaziz al-Bardi is a Saudi pharmacist from Medina, owner of Al Fouad Conference Organising Company.

He contributed to the organisation of many medical conferences and events of the Ministry of Health, including 6 conferences under the umbrella of the Saudi Society for Neurosurgery under the name (Developments in Neurosurgery in Jeddah) under the auspices of King Fahd Hospital (Ministry of Health) in partnership with King Abdulaziz University.

He passed away on ,Friday August 6 ,2021 and was buried in Al-Baqa'a in Medina.

May Allah forgive him and have mercy on him and give him strength and pardon him. Admit him into the Garden, protect him from the punishment of the grave and the torment of the hell.

O God, make his knowledge and his work his protection, so that he may enter paradise.

"Inna lillahi wa inna ilayhi raji'un" Verily we belong to God, and verily to Him do we return"

SANS ACADEMIC ACTIVITES

INTENSIVE NEUROSCIENCE NURSING SKILLS COURSE

July8th, 2021

By Dr. Ibrahim Alhalal

Al-Qatif Central Hospital | QCH Saudi Arabia

The first intensive neuroscience nursing course (INNS) was held on July 8, 2021 in Qatif Central Hospital in Eastern Province in collaboration between SANS and the Ministry of Health; Cluster E1. The course was founded and led by Dr. Ibrahim Alhalal in collaboration with SANS Academy. This course aims to improve nurses' knowledge and skills in clinical neuroscience and to assist nurses in providing high quality care to patients with neurological conditions that is reflected in patient outcomes. The event lasted from 8:00 a.m. to 5:00 p.m. and was attended by approximately 55 nurses at QCH Main Auditorium, with appropriate social distance and precautions taken. In addition, over 150 participants from across the Kingdom and some Gulf countries attended virtually at Zoom Webinar. 16 high profile speakers from a variety of disciplines



delivered 20 lectures covering a wide range of topics including evidence based nursing practice, patient safety and rehabilitation. At the end of the course, an electronic Evaluation Exam with 30 multiple-choice questions was given to the onsite and virtual attendees.

It is planned to deliver this course as part of the SANS Academy in different regions of the Kingdom and to design it as a two-day course with didactic lectures and interactive workshops.







SANS UPCOMING EVENTS

2022 SANS Annual Meeting



NEUROSURGERY

BACK TO LIFE

HOSTED BY KING ABDULAZIZ MEDICAL CITY,
MINISTRY OF NATIONAL GUARD HEALTH AFFAIRS



SAVE THE DATE





25/26/27 March, 2022 22/23/24 Shabaan, 1443



Riyadh

SANS UPCOMING EVENTS





For further information, visit our website <u>HERE</u>

SANS UPCOMING EVENTS







LOCAL UPCOMING EVENTS





TARGET AUDIENCE

- Orthopedic Surgery
- Neurosurgery
- · Anesthesia, Pain Management
- Physical Medicine & Rehabilitation
- Radiology
- Neurology
- Rheumatology
- Physiotherapy
- Nursing
- Others

















GUEST SOCIETIES



EURO SPINE













info@saudispine.org





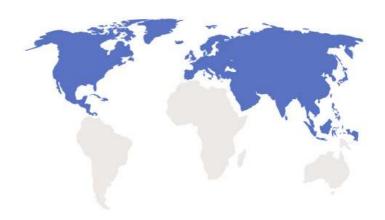




www.saudispine.org

UPCOMING EVENTS

Add these important dates to your calendar and plan to be a part of it.



- 2021 AANS Annual Scientific Meeting: Stronger Together-Orlando: Aug.21-25, 2021
- Learn more
- 2021 EANS Congress- Hamburg, Germany: Oct. 03-07, 2021 Learn more

• 2021 CNS Annual Meeting: Vision for the Future-Austin, Texas: Oct. 16-20, 2021

Learn more

• XVII WFNS World Congress of Neurosurgery - Bogota, Colombia: March.13-18, 2022

NEWSLETTER

Volume 2

Issue 3

Saudi Arabia

For more information, you can reach us at:



SANS.newsletter@sans.org.sa



@SansMed



http://www.sans.org.sa



Let's help you to make a difference in the neurological surgery field, whatever your interest, you can help further our mission by supporting our newsletter in submitting

articles and reviewing research. We always strive to make our newsletter more than just a newsletter by being informative and using them to serve the field of Neurological Surgery. We are always open to any ideas that will help us improve our newsletter.