



SANS NEWSLETTER

Our Reader is our Leader

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يوم التأسيس
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— ١٤٣٩ هـ / ١٧٢٧ م —



يوم ديننا
Our Story



www.sans.org.sa

4

We are excited to announce that we are now entering our 4th year of delivering local neurosurgical news and insights to you through our newsletter.



ISSUE MESSAGE

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Welcome 2023

Dear valued readers,

It gives us great pleasure to present Issue 1 of Volume 2023 of the SANS Newsletter! Over the past three years, we have provided you with countless news and stories covering a wide range of neurosurgical topics.

As we move into our 4th year, we are committed to provide you with interesting topics.

This issue begins with an article by Professor Abdulhakim Jamjoom on the idea of starting a Saudi Journal of Neurosurgery.

In this issue, we dive into the current programme of our upcoming conference - the 17th Annual Meeting of SANS - which will be held in Jeddah from 4-6 March 2023.

We also have an exclusive interview with an experienced neurosurgeon who shares his insights and experience in the field. You will hear from him how he successfully overcame the challenges of neurosurgery.

In addition, we have included neurosurgical guidelines. Whether you are looking for management of spontaneous intracerebral haemorrhage, we have got you covered.

Finally, we would like to thank you for your feedback and comments. We are always looking for ways to improve our content and make our newsletter even more valuable to you.

We look forward to hearing your thoughts!



NEUROSURGERY IN SAUDI ARABIA

By Prof. Abdulhakim B. Jamjoom | KAMC | Jeddah



Are we Ready for the Saudi Journal of Neurosurgery?

In a recent paper, my co-authors and I examined the citation patterns of 231 original research articles published in our journal *Neurosciences* between 2011 and 2019 [*Neurosciences* 2022; 27(2): 116- 120]. The average number of

article citations was 11.6 (September 2021). We found that the number of article citations correlated significantly with the age of the article, sample size, study design and level of evidence.

The number of articles published by neurosurgeons (including spine surgeons) during the 9-year period was 34 (14.7%).

The characteristics of these articles are summarised in the table below.

FINDINGS



The number of article citations correlated significantly with the age of the article, sample size, study design and level of evidence.

Are we Ready for the Saudi Journal of Neurosurgery?

Parameter	Features	Articles (%) [Total: 34]
Study design	RCTs and Prospective	2(6%)
	MAAs and SRs	3(9%)
	Experimental	5(15%)
	Cross sectional and Surveys	5(15%)
	Retrospective case series	19(56%)
Study level of evidence	I, II and III	2(6%)
	IV	25(74%)
	Undermined	7(21%)
Study field	Clinical	28(82%)
	Non-clinical	6(18%)
Publishing country	KSA	13(38%)
	China	13(38%)
	Turkey	3(9%)
	Iran	1(3%)
	Others	4(12%)
Authors' academic affiliation	University	24(71%)
	Non-university	10(29%)

In this short communication, I would like to discuss whether the time is ripe for the Saudi Association of Neurological Surgery (SANS) and the neurosurgical community in the Kingdom of Saudi

Arabia (KSA) to consider establishing a Saudi neurosurgical journal, aptly named the Saudi Journal of Neurosurgery. I will endeavour to lay down the arguments for and against the establishment of a Saudi

neurosurgical journal. The data I will mention are from published and unpublished work done by my co-researchers and myself.

Are we Ready for the Saudi Journal of Neurosurgery?

The argument for the establishment of a Saudi neurosurgical journal

The number of neurosurgeons in Saudi Arabia is increasing rapidly. We have calculated that by 2021 there will be a total of 238 neurosurgeons in KSA, a significantly higher number than the 84 we calculated in 2016. Many of the newly qualified neurosurgeons have academic interests and are looking for opportunities to contribute to the neurosurgical literature.

The number of articles published by KSA neurosurgeons is also increasing rapidly. We calculated that the average annual publication rate of KSA neurosurgeons in the international PubMed literature was 20 articles in the last decade (2011-2020), compared to 7.6 articles in the previous two decades (1991-2010).

Neurosciences, currently the official journal for SANS, is a quarterly publication published by the Riyadh Armed Forces Hospital. It covers the full range of neuroscience disciplines. Many KSA neurosurgeons feel that the journal has a high rejection rate for their articles.

Of the 231 original articles published in Neurosciences between 2011 and 2019, 61% were from outside KSA. It is therefore

fair to assume that a new Saudi neurosurgical journal is unlikely to depend solely on contributions from KSA neurosurgeons. If well promoted, it is likely to receive considerable participation from international neurosurgeons and from researchers in other related fields.

Many of the publications by KSA neurosurgeons in the international PubMed literature over the past decade have been in low impact factor journals such as the Asian Journal of Neurosurgery. Some researchers were forced to publish in non-indexed predatory journals.

The experience of the growth and success of the SANS Newsletter and the significant increase in academic activities organised by SANS encourage the Association to take the next step and establish a neurosurgical journal.

The initiation process is always difficult and it is only natural that we hesitate and have doubts. I was a registrar in Bristol in 1987 when the late Huw Griffith founded the British Journal of Neurosurgery. Even then, the separation from the more established Journal of Neurology, Neurosurgery and Psychiatry was disputed and resisted by many. The British Journal of Neurosurgery flourished and proved to be a good addition to the international neurosurgical literature.



Those who believe in the production-oriented rather than the need-oriented mantra of "if you build it, they will come" would argue that if we invest the time and effort in establishing a well-structured Saudi neurosurgical journal, the participation of researchers will follow.

Are we Ready for the Saudi Journal of Neurosurgery?

The argument against the establishment of a Saudi neurosurgical journal

KSA researchers are likely to continue to submit their quality work to well-established international journals with high impact factors. They are encouraged to do so by the policies of their institutions.

Of the total 238 neurosurgeons in KSA, only 25 (11%) are affiliated to universities. Many neurosurgeons who are not affiliated with universities have contributed significantly to the literature. Nevertheless, university affiliates are likely to be more active in general, and they are a minority in KSA. In 2014, we calculated a mean h-index for university staff of 7 compared to 2.5 for all neurosurgeons.

The total number of articles published by neurosurgeons remains modest. We calculated 34 neurosurgical articles published in Neurosciences in 9 years and 352 articles published in the international neurosurgical literature in 30 years. Such productivity may not be enough to sustain a new journal.

The experience with the Pan Arab Journal of Neurosurgery is not encouraging. The journal was founded in 1995 by the late Prof Khalaf Al-Moutaery. It was published by the Riyadh Armed Forces Hospital first as a paper journal and then only online. Twenty-six years later, the journal had to be relaunched in Egypt under a new editorial board.

Although our journal of neuroscience was established in 1996, it still has a relatively modest impact factor. It would be logical for the neurosurgical community in KSA to continue supporting this journal to increase its impact.

According to the Scimago website Journal and Country Rank (SJR), KSA is ranked 39th in the world for clinical neuroscience, based on total number of documents. None of the countries ranked up to 20 ranks above KSA had their own neurosurgical journal listed on the SJR website.

The financial and logistical cost of starting a new journal is daunting and the success of the project is unpredictable. It is no use if the journal ends up being just the graveyard for work that could not be published elsewhere.

Conclusion

The establishment of a Saudi neurosurgical journal is inevitable, whether in the near or distant future. Based on the above points, I would say that the decision to establish a Saudi neurosurgical journal soon can go either way. I still believe that we are not there yet at the moment, but considering the growth of the neurosurgical workforce and productivity in KSA, we will be there in the next few years. In my opinion, SANS should nominate a committee to look into this matter every 2 years.

SANS2023

17th SANS Annual Meeting



17TH ANNUAL MEETING OF THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY



MARCH 4TH, 2023

MARCH 5TH - 6TH, 2023

WORKSHOP

CONFERENCE

TAKING STANDARDS TO THE NEXT LEVEL



**SANS
2023**

SANS 2023

Taking Standards to the Next Level

Save the date for the 17th Annual Meeting of the Saudi Association of Neurological Surgery

#1



PROFESSOR ABDULHAKIM B. JAMJOOM

President, SANS 2023

The meeting's slogan is "Taking Standards to the Next Level" as we hope that many of the presentations will emphasise the concept that as care providers it is our duty provide our patients with highest standard of care possible.

4-6 March 2023

The 17th Annual Meeting of the Saudi Association of Neurological Surgery (SANS 2023) will be hosted by the Section of Neurosurgery of King Abdulaziz Medical City (KAMC) and King Saud Bin Abdulaziz University for

Health Sciences (KSAU-HS), Western Region at the Hilton Hotel, Jeddah during 4-6 March 2023 and organised by Kono Retaj, as in previous years.

This year's meeting will be organised over two days with eight sessions and more than 50 presentations

covering the full spectrum of neurosurgical topics.

There will be one session for the members of the Saudi Society of Neurological Interventions and another session for the members of the Saudi Society of Skull Base Surgery.

Opening Ceremony & 2023 SANS Gold Medal Prize Award

5 March 2023
(10:00- 10:30)
Hilton Hotel



Gala Dinner (By invitation)



5 March 2023
(20:00)
The Multaqa Restaurant

The 17th Annual Meeting of the Saudi Association of Neurological Surgery

#2

#1

INTERNATIONAL SPEAKERS

Professor Jacques Morcos from Miami, USA
Professor Atul Goel from Mumbai, India
Professor Marios Papadopoulos from London, UK
Professor Hugues Duffau from Montpellier, France



#2

NATIONAL SPEAKERS

- Nearly 50 Neurosurgeons from outside Jeddah region
- Nearly 30 Neurosurgeons from the Jeddah region

#3

KEYNOTE SPEECHES

- Prof. Khalaf AlMoutaery's Keynote Speech: "Cerebrovascular and skull base surgery: the inseparable twins" By Prof. Jaques Morcos
- Prof. Zain Alabedeen Jamjoom's Keynote Speech : "Lessons of the Long Journey" by Prof. Ahmed Ammar



In the meantime, explore the already available information on the event [HERE](#)

SANS 2023

#3

*The 17th Annual Meeting of the Saudi
Association of Neurological Surgery*



SANS 2023 Scientific Sessions

Date	Session	Time	Topic
Sunday 5 th March 2023	1	8:00- 10:30	Early Morning General Session
	2A	11:00- 13:00	Neuro-oncology
	2B	11:00- 13:00	Pediatric Neurosurgery
	3A	14:00- 16:00	Skull Base and Mixed Topics
	3B	14:00- 16:00	Saudi Society of Neurological Interventions
	4A	16:30- 17:30	Flash Oral Presentations
	4B	16:30- 17:30	Flash Oral Presentations
Sunday 6 th March 2023	1	8:00- 10:30	Early Morning General Session
	2A	11:00- 13:00	Spine
	2B	11:00- 13:00	Functional and General Neurosurgery
	3A	14:00- 16:00	Vascular and Endovascular
	3B	14:00- 16:00	Saudi Society of Skull Base Surgery
	4A	16:30- 17:30	Flash Oral Presentations
	4B	16:30- 17:30	Flash Oral Presentations



SANS 2023 Workshops

SANS 2023

#4

17TH ANNUAL MEETING OF
THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY

PRE-CONFERENCE WORKSHOP

INNS
Intensive Neuroscience Nursing Skills

MARCH 4TH, 2023

17TH SANS ANNUAL MEETING

REGISTRATION FEE
300 SAR

SANS 2023

VENUE: Jeddah Hilton

7 CME ACCREDITED

www.sans.org.sa

17TH ANNUAL MEETING OF
THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY

PRE-CONFERENCE WORKSHOP

**NEURO ONCOLOGY
REVIEW COURSE**

MARCH 4TH, 2023

REGISTRATION FEE
300 SAR

SANS 2023

VENUE: Jeddah Hilton

6 CME ACCREDITED

www.sans.org.sa

17TH ANNUAL MEETING OF
THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY

PRE-CONFERENCE WORKSHOP

NEUROLIFE

MARCH 4TH, 2023

REGISTRATION FEE
300 SAR

SANS 2023

VENUE: Jeddah Hilton

6 CME ACCREDITED

www.sans.org.sa

17TH ANNUAL MEETING OF
THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY

PRE-CONFERENCE WORKSHOP

**RESEARCH AND
STATISTICS COURSE**

MARCH 4TH, 2023

REGISTRATION FEE
200 SAR

SANS 2023

VENUE: Jeddah Hilton

4 CME ACCREDITED

www.sans.org.sa

FOR MORE DETAILS, CLICK [HERE](#)

SANS 2023 #5

SANS 2023 Workshops



17TH ANNUAL MEETING OF
THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY

PRE-CONFERENCE WORKSHOP

**STUDENT NEUROSURGICAL
BOOT CAMP**

MARCH 4TH, 2023

REGISTRATION FEE
200 SAR

SANS 2023

VENUE: Jeddah Hilton

www.sans.org.sa

7 CME ACCREDITED

Powered by KonoRetaj

SANS 2023 Competition



17TH ANNUAL MEETING OF
THE SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY

NEUROGRAPHIA

SAUDI ASSOCIATION OF NEUROLOGICAL SURGERY
NEUROSCIENCE ART COMPETITION 2023

MARCH 4TH, 2023

SANS 2023

VENUE: Jeddah Hilton

www.sans.org.sa

Powered by KonoRetaj

FOR MORE DETAILS, CLICK [HERE](#)

THE EXPERT'S VOICE

An Interview with a Neurosurgeon



DR. SAAD AL HUSSEIN

John Hopkins Aramco Healthcare | Dhahran, Saudi Arabia

We are appreciative that Dr. Saad 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?

Saad Al Hussein (SH): Helping the patients

(SN): Describe yourself using three words.

(SH): Simple, loving and caring

(SN): What are you passionate about?

(SH): My parents and my family

(SN): How do you handle stressful situations?

(SH): Through prayers and patience

(SN): What are you known for?

(SH): Calmness and quiet

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

(SH): Do no harm

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

(SH): Physicist

(SN): What is your favourite movie?

(SH): Forrest Gump

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

(SH): Reading

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

(SH): Neuroanatomy

(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?

(SH): I am the only doctor in my family. My children look at my career with pride. One of them is interested in becoming a doctor.

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

(SH): Brien Benoit at the Ottawa Civic Hospital

An Interview with a Neurosurgeon

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

(SH): The first surgery I did on my first day as a consultant was with one of my surgeon colleagues at Aramco Hospital. There were 2 senior neurosurgeons but he asked me to take over his surgery. He said, 'I know you from medical school and that's long enough.'

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

(SH): I have been fortunate to have wonderful colleagues and assistants who have supported me, and I have protected time with my family.

(SN): Could you describe your journey in Residency? Any lessons learned

(SH): Residency is a 20-year journey that has been condensed into 5 years. A journey that is engraved in the heart more than words carved in stones. I have learnt as much from negative role models as I have from positive role models.

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

(SH): My first experience with the brain was during my internship. It was a mixed feeling of fascination and worry of doing something wrong. I had the feeling that everyone was watching me and waiting for me to make a mistake.

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

(SH): The biggest issue is keeping up with new technologies and techniques. The basic concern remains the same: patient safety and well-being.

(SN): What is the majority of your surgical practice? Do you have a specific case that sticks with you?

(SH): General practice. Brain, spine and paediatric Neurosurgery

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

(SH): By the grace and mercy of Allah, I have been able to cure complicated cases in children and adults. I remember a child whom I treated at the beginning of my practice with intractable epilepsy due to temporal lobe glioma, before the era of navigation we were to perform a complete resection. He is now a grown man living a normal life.

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

(SH): The feeling and belief that we are tools in the hands of the Almighty Creator (Allah) is the source of our comfort and relief in difficult times before, during and after surgery.

(SN): Could you talk about a time you took on a leadership role?

(SH): I believe that a leader in any team is the one who leads, supports, inspires and sustains his team while maintaining his place among them. I have tried to do this during my leadership positions. I am not sure to what extent I have succeeded in doing so.

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

(SH): Neurosurgery is very, very special. It will continue to be a unique specialty in medicine. Advances in technology will be the cornerstone for future development in this field.

An Interview with a Neurosurgeon

(SN): What is important in neurosurgical training?

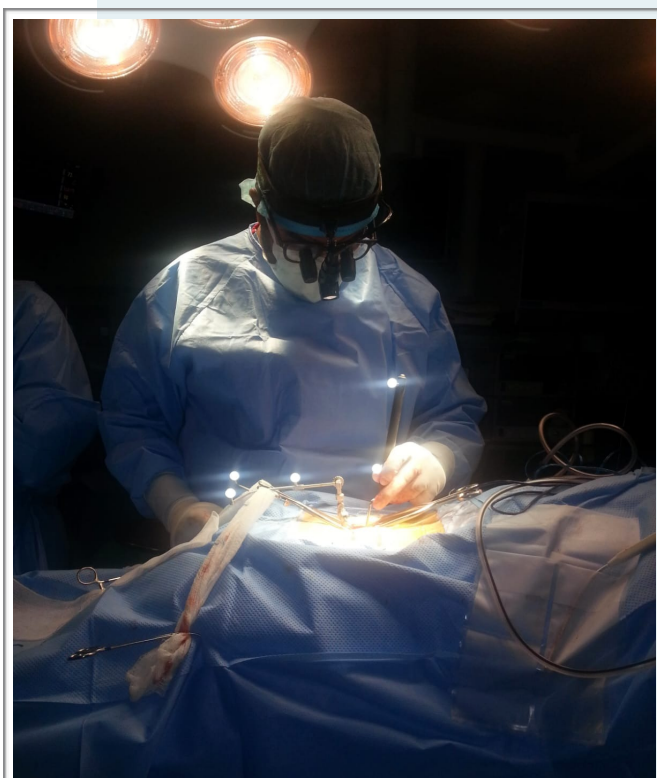
(SH): Patience, patience and patience and the right attitude

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

(SH): If you are willing to stand for hours in OR, be sleepless for days during residency and be happy at the end, then choose neurosurgery. And one more thing I want to say to students: if you want to be a neurosurgeon, do not let anyone stop you.

(SN): Thank you for talking to us, and we are very proud of your achievements. Is there anything you can tell us that might surprise people reading the article?

(SH): I would like to say that in my career I have not seen a neurosurgeon who regrets being a neurosurgeon. Maybe there is something in our souls or genes that made us choose this profession as a passion and lifestyle. Congratulations to all of us who have loved, worked for and lived this profession.



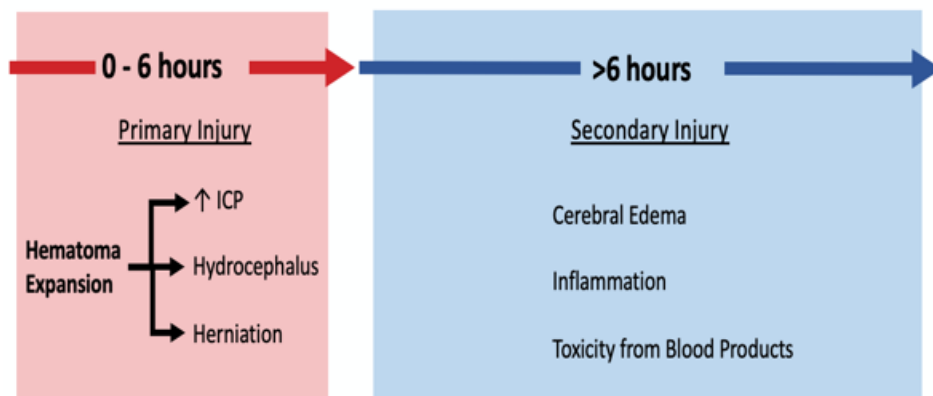
NEUROSURGICAL GUIDELINES

Prepared by Dr. Omar Mansi, | Neurosurgery Resident

American Heart Association (AHA) 2022 Guidelines for the Management of Spontaneous Intracerebral Hemorrhage

Heamorrhagic strokes account for about 10% of strokes, with early mortality of 30-40%. These guidelines replace the previous guideline AHA /ASA 2015 ICH.¹² These new guidelines are for primary spontaneous ICHs.

Mechanisms of ICH Injury



ICH Etiology Determines Hemorrhage Location

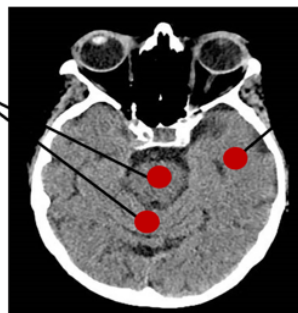
Deep/Posterior Fossa ICH Etiologies

Arteriolosclerosis

- Penetrating arteriole lipohyalinosis due to HTN, DM, Age

Macrovascular

- AVM
- Aneurysm
- Dural AVF
- Cavernous Malformation/Cavernoma
- Cerebral Venous Thrombosis



Lobar ICH Etiologies

- Cerebral Amyloid Angiopathy
 - Amyloid deposition in vessel walls

Arteriolosclerosis

Macrovascular

Diagnostic Strategy to Identify ICH Etiology

Clinical Entity	Recommended Diagnostic Modality
<ul style="list-style-type: none"> Lobar ICH. <ul style="list-style-type: none"> - Age <70 yrs. Deep / Posterior Fossa ICH. <ul style="list-style-type: none"> - Age <45 yrs. - Age 45 - 70 yrs , No HTN. 	CT Angiogram / Venogram (Recommended 1) MRI / MRA (Reasonable 2A) Cerebral Angiogram (Reasonable 2A)
<ul style="list-style-type: none"> Spontaneous IVH with no ICH (Any age). CTA/MRA suggestive for vascular pathology. 	Cerebral Angiogram (Recommended 1)
Spontaneous ICH with negative CTA / DSA with suspicious structural cause	MRI / MRA (Reasonable 2A)
Spontaneous ICH with negative DSA with suspicious vascular cause	Repeat DSA in 3-6 months (Recommendation 2B)

Medical and Neurointensive Treatment for ICH

Acute Blood Pressure Lowering in Spontaneous ICH

Elevated BP on presentation is associated with worse outcome, higher risk of haematoma extension and death.

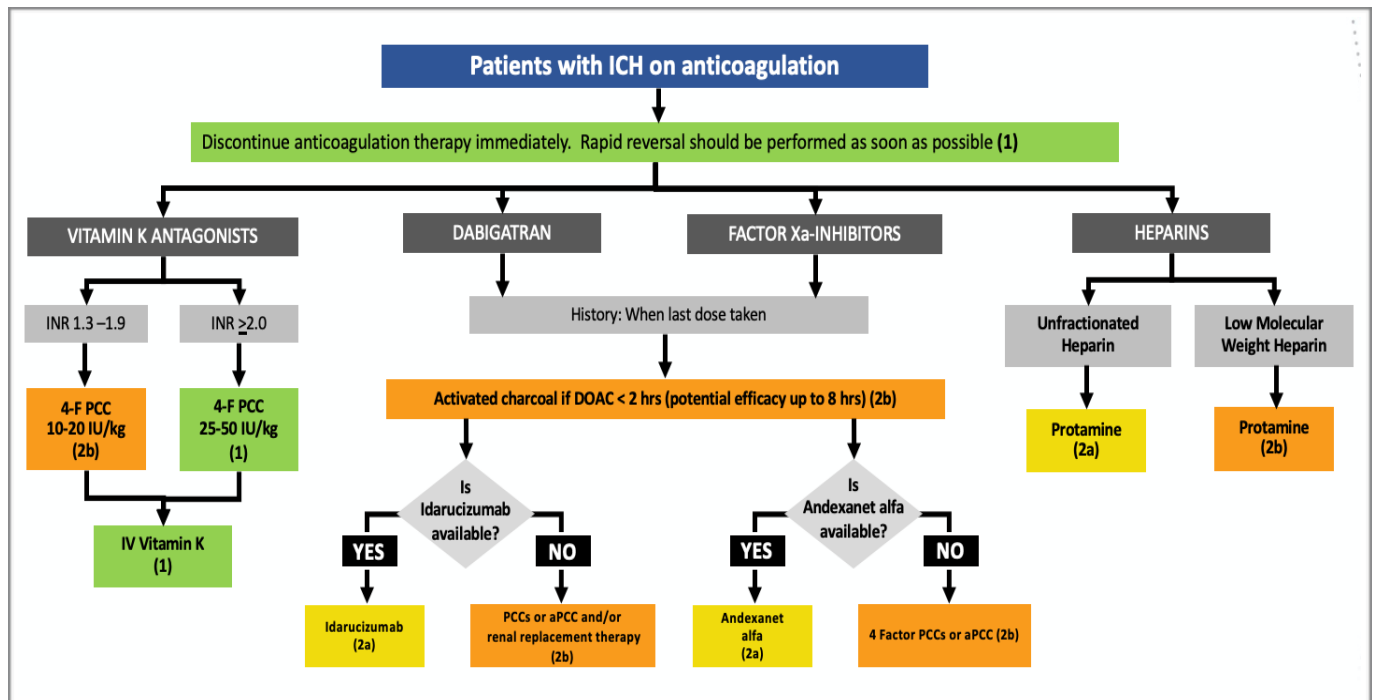
To improve functional outcomes.

- Medication titration to maintain smooth & sustained control of BP, avoiding peaks and large variability in SBP, can be beneficial. (Recommendation 2A)
- Initiating treatment within 2 hours of starting ICH and reaching the target level within 1 hour may be beneficial to reduce the risk of haematoma expansion. (Recommendation 2A)

- In ICH mild to moderate severity with blood pressure between 150 and 220 mmHg, acute lowering of SBP to a target value of 140 mmHg with the aim of maintaining the value in the range of 130 to 150 mmHg is safe and may be useful. (Recommendation 2B)
- For large or severe ICH or those requiring surgical decompression, the safety and efficacy of intensive BP lowering are not well established. (Recommendation 2B)
- If ICH is mild to moderate in severity and the SBP >150 mmHg, acute lowering of SBP to hours. <130 mmHg is potentially harmful. (Recommendation 3, harm, strong)

Hemostasis & Coagulopathy

Management of Anticoagulant-Related Hemorrhage



Abbreviations: 4-F PCC indicates four-factor prothrombin complex concentrate; aPCC, activated prothrombin complex concentrate; DOAC, direct oral anticoagulant; ICH, intracerebral hemorrhage; and INR, international normalized ratio. (source AHA guidelines: PMID: 26089327, DOI: 10.1161/STR.0000000000000070)

Antiplatelet-Related Hemorrhage in Spontaneous ICH

For patients with spontaneous ICH, treated with antiplatelets:

- Platelets transfusion is reserved for those requiring emergency surgery. (Recommendation 2B)
- The effectiveness of desmopressin with or without platelets transfusion is uncertain. (Recommendation 2B)
- Platelets transfusion in non-surgical procedure is harmful and should be avoided. (Recommendation 3, harm, strong)

Seizures and Antiseizure Medication (ASM) in spontaneous ICH

New onset seizures in sICH are relatively common (2.8-28%) and occur within the first 24 hours of haemorrhage.

- Start ASM for those who have seizures. (Recommendation 1)
- Perform EEG in suspected cases and start ASM if seizure is diagnosed. (Recommendation 2A)
- Avoid ASM in cases with no evidence of seizures (Recommendation 3, no benefit)

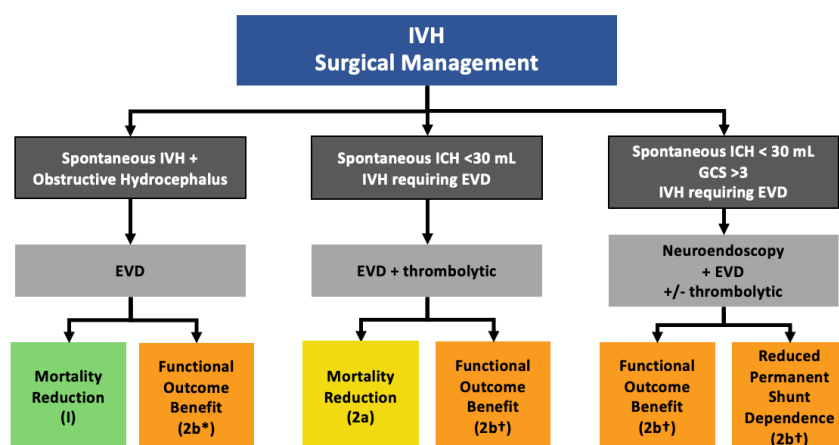
Surgical Management

Recommendations for MIS Evacuation of ICH (endoscopic or stereotactic aspiration +/- thrombolytics)

- Patient selection: Supratentorial ICH, hematoma volume >20-30 mL, GCS 5-12.
- MIS ± haematoma thrombolysis a mortality benefit compared with medical management alone (Recommendation 2A).

- MIS ± haematoma thrombolysis has uncertain functional outcome (Recommendation 2B)
- MIS for haematoma evacuation has a functional benefit compared to conventional craniotomy (Recommendation 2B)

Recommendations for MIS Evacuation of IVH



Recommendations for Craniotomy for Supratentorial Hemorrhage

- Craniotomy for hemorrhage evacuation to improve mortality or functional outcomes is of uncertain benefit in moderate to severe ICH (Recommendation 2B).
- Craniotomy for hemorrhage evacuation may be considered as a life-saving measure in patients whose condition is deteriorating (Recommendation 2B).

Recommendations for Craniectomy for Supratentorial Hemorrhage

- Patient selection: patients with supratentorial ICH who are in a coma, have large haematomas with significant midline shift, or who have an elevated ICP that is unresponsive to medical treatment.
- Decompressive hemicraniectomy (DHC) +/- haematoma evacuation may be considered to reduce mortality. (Recommendation 2B)
- The effectiveness of DHC +/- hematoma

evacuation in improving functional outcomes is uncertain. (Recommendation 2B)

Craniotomy for Posterior Fossa Hemorrhage

- Patient selection: Neurological deterioration, brainstem compression, hydrocephalus, or ICH Volume > 15 ml or equal.
- Immediate surgical removal of hemorrhage ± EVD is recommended to reduce mortality. (Recommendation 1)

CLINICAL CHALLENGE

Prepared by Dr. Mohammed Bafaquh | King Fahad Medical City | Riyadh



The Forgotten Anatomy

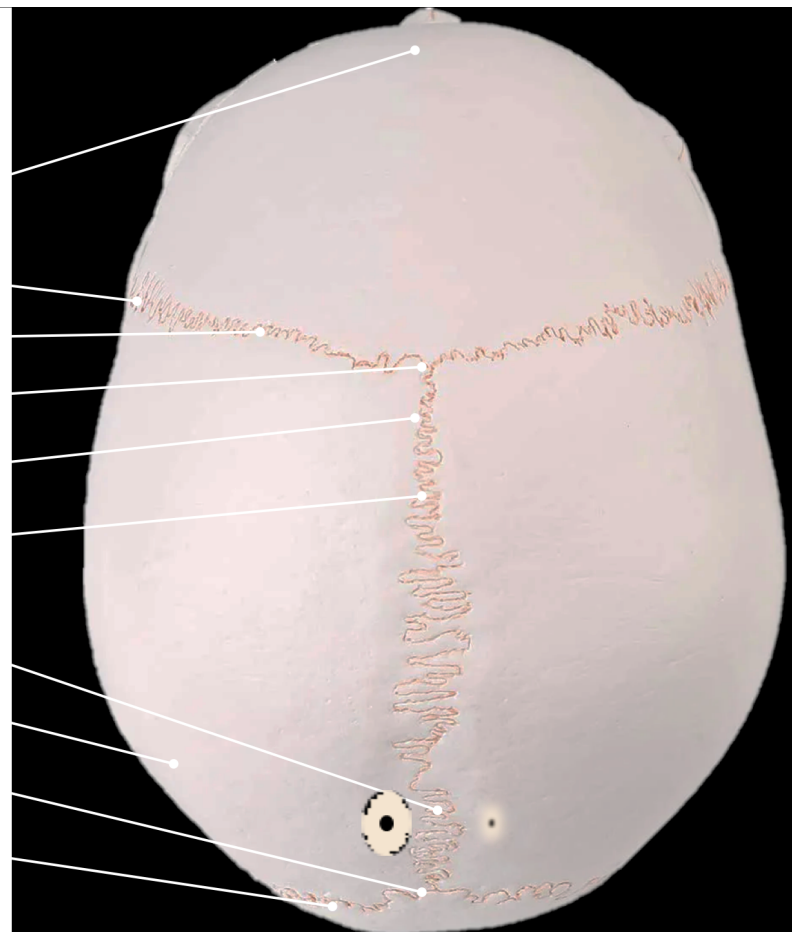
SANS LAB
EST. 2022



Name structures along the superior sagittal suture.

1. A point on the frontal where the elevation of the frontal above the chord from nasion to bregma is greatest.
2. is the point where the coronal suture crosses the superior temporal line.
3. A suture.
4. Point where the coronal and sagittal sutures intersect.
5. A midline point where a paracoronar plane through the right and left poria intersects the midsagittal skull outline.
6. Is the highest ectocranial point on the skull's midline.
7. Midline point where a line connecting the parietal foramina (when present) intersects the midline.
8. A point where the sagittal and lambdoid sutures intersect.
9. A point of greatest cranial breadth.
10. A suture.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10



Anatomy Research Group:

Mohammed Bafaqeeh, Faris Yaghmoor, Abdulaziz Almusa, Basem Noorelahi, Rothaina Saeedi.

NEUROSURGERY NEWS

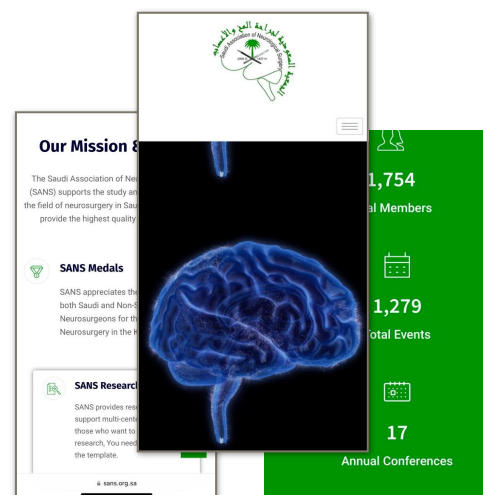
Our News

WE ARE PLEASED TO ANNOUNCE THE LAUNCH OF OUR SANS NEW WEBSITE!

We are thrilled to announce the launch of our SANS new website design!

We have been working hard to create a fresh look that is easy to navigate and more user-friendly.

Don't miss anything!



We are pleased to announce the launch of our newly designed website. Our goal with this redesigned website is to provide you with a user-friendly browsing experience.

What's new on our website?

The new website features a clean design and a simplified layout that makes it easier for you to find the information you need.

We have added a range of new content to the site, including a section focused on our neurosurgeons so you can find more detailed content about them. We will be constantly updating our content with helpful information.

Have a scroll through our new website - we would love to hear your thoughts.

Thank you for your support, and we look forward to hearing from you!

CLINICAL CHALLENGE

The Answer



The forgotten anatomy: Name structures along the superior sagittal suture.

1. **Metopion:** A point on the frontal where the elevation of the frontal above the chord from nasion to bregma is greatest.
2. **Stephanion:** is the point where the coronal suture crosses the superior temporal line.
3. The coronal suture.
4. **Bregma:** Point where the coronal and sagittal sutures intersect.
5. **Apex:** A midline point where a paracoronal plane through the right and left poria intersects the midsagittal skull outline.
6. **Vertex:** Is the highest ectocranial point on the skull's midline.
7. **Obelion:** Midline point where a line connecting the parietal foramina (when present) intersects the midline.
8. **Lambda:** A point where the sagittal and lambdoid sutures intersect.
9. **Euryon:** A point of greatest cranial breadth.
10. The lambdoid suture.

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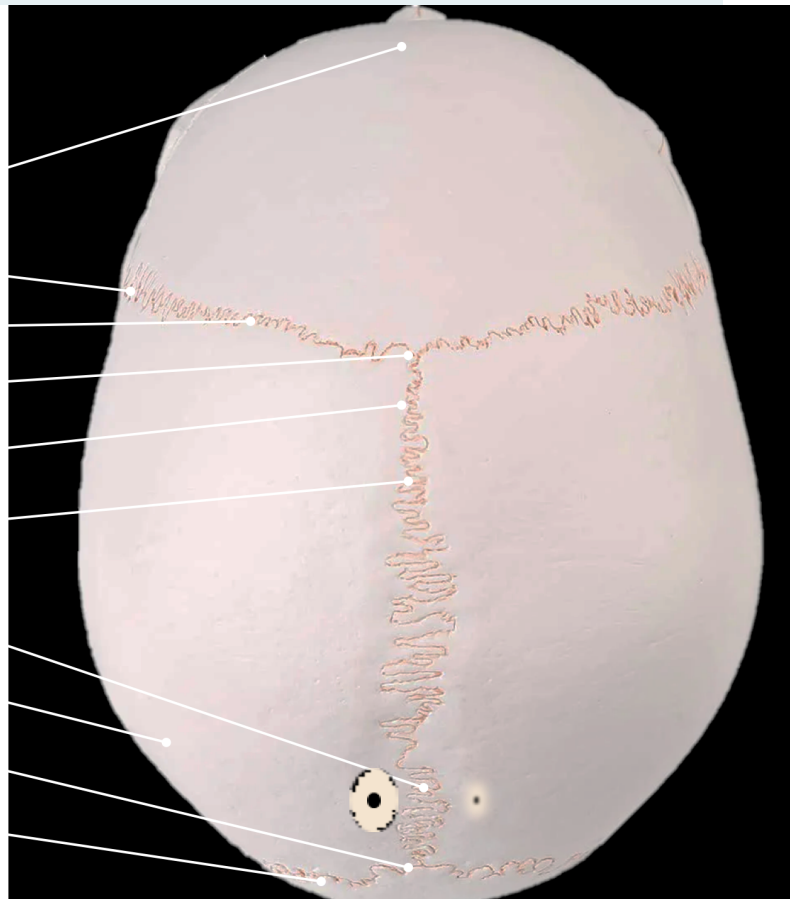
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Anatomy Research Group:

Mohammed Bafaqeeh, Faris Yaghmoor, Abdulaziz Almusa, Basem Noorelahi, Rothaina Saeedi.


NEUROSURGERY NEWS

UPCOMING EVENTS



ARABSPINE COURSE DIPLOMA

Education & Training Center, Neuro Spinal Hospital, Dubai, UAE



MASTER COURSE

MODULE 6



15th & 16th May 2023

Eligibility: Graduates of ArabSpine Course Diploma


TOPICS

- SPINE ENDOSCOPY
- COMPLEX SPINE SURGERY

In collaboration with:

Accredited by:



AMERICAN MEDICAL ASSOCIATION

+971 4 573 0737 / 33

ascdiploma@yahoo.com

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22nd DUBAI INTERNATIONAL SPINE CONFERENCE

- SPINE DEFORMITY IN ELDERLY: WHEN TO OPERATE? WHAT EXTEND OF SURGERY IS REASONABLE
- ARTIFICIAL INTELLIGENCE IN SPINE: UPDATE
- "NOT SO SIMPLE" COMPLICATIONS IN "SIMPLE" SPINE SURGERY
- REGENERATION MEDICINE - STEM CELLS AND SPINE DISEASE
- PERIPHERAL NERVE SURGERY

17-19 MAY 2023
GRAND HYATT, DUBAI, UAE

CALL FOR ABSTRACT
DEADLINE: 15 APRIL 2023

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مستشفى العناية العصبية والمخ العنق
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NEUROSURGERY NEWS

UPCOMING EVENTS



7th ARABSPINE 2023 Annual Meeting

2023 Theme:

- **Cranio-cervical junction disorders**
- Spinal Tumors
- Degenerative Scoliosis
- Spinal Trauma

Cadaveric Dissection, Tactics & Debates

- Expert panel discussion
- National and international surgeons
- Live surgery

9-11 November 2023
Department of Neurosurgery at
King Abdulaziz Medical City in Riyadh
King Saud bin Abdulaziz University
for Health Sciences

W. Alshaya
President of the
Meeting
Waelalshaya@yahoo.com
spine@nshdubai.com
www.arabspine.org

SAVE THE DATE !



ARABSPINE COURSE DIPLOMA

MODULE 1 14th, 15th & 16th May 2023

Course Highlight

- Lumbar Spine: Basic Science & Practice Essentials
- Lumbar Disc Herniation and Sciatica
- Lumbar Canal Stenosis
- Spondylolisthesis
- Axial Back Pain/ Sacroiliac Joint Pain
- Facet Joint Pain. Evidence, Outcome & Clinical Pearls

Practical Hands-on Workshop

- Free-Hands - Pedicle Screw Fixation - Thoracic / Lumbar
- Imaging Guided Pedicle Screw Fixation
- Spinal Navigation
- Percutaneous Pedicle Screw Fixation
- Mini TLIF / ALIF
- Lateral and Anterior Approach
- Spine Microsurgery
- Spinal Cord Stimulation
- Spinal Injection techniques and Pain Management techniques

MODULE 3 14th, 15th & 16th May 2023

Course Highlight

- Tumors
- Primary Spinal Tumors
- Spinal Metastasis
- Surgery
- Infections
- Spondylodiscitis
- Pott's Disease
- Surgical Infections in Children
- Spinal Trauma
- Cervical Injury
- Thoraco Lumbar Spine Injuries
- Rehabilitation after SCI

Practical Hands-on Workshop

- Thoracic Spine: - Posterolateral Approach
- Mini-thoracotomy
- MIS for Lumbar Spine
- ALIF & OLIF
- Cervical Spine: - Anterior & Posterior Approaches
- Pain Management techniques

WHO CAN ATTEND?

Neurosurgeons
Orthopedists
Spine Specialists
Spine Related Specialists (Specialists, Chiropractors, Pain Specialists, Rheumatologists, etc)

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NEUROSURGERY NEWS

UPCOMING EVENTS

April
21-24
2023

The 2023 AANS Annual Meeting
Los Angeles

[Learn more](#)

September
09-13
2023

The 2023 CNS Annual Meeting
Washington, D.C.

[Learn more](#)

December
04-08
2023

**The 2023 WFNS World Congress
Of Neurosurgery**
Cape Town

[Learn more](#)

For more information ,you can reach us at:



SANS.newsletter@sans.org.sa



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NEWSLETTER

Volume 4

Issue 1

SANS

Saudi Arabia