

## **Khaled Zayed Ali Alawneh, MD**

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### **Biography**

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I was born in Jordan on March 7<sup>th</sup>, 1976. I received Bachelor degree of Medicine and General Surgery from Kufa University, Iraq, graduated in 2001. After graduating, I completed a rotating internship at the Ministry of Health, Jordan. I joined the Royal Medical Services and worked as general practitioner for 18 months. In 2004, I joined four-years-residency training program at the Department of Diagnostic Radiology and Nuclear Medicine – Faculty of Medicine – Jordan University of Science and Technology (JUST). Thereafter, I worked at the National Center for Diabetes and Endocrinology as general radiologist from July 2008 to May 2009. I passed the Jordan Medical Council Exam for Board certificate in Diagnostic Radiology.

I was granted a scholarship from JUST to join advanced training fellowship program in Diagnostic and Interventional Neuroradiology at Carl Gustav Carus University Hospital - Dresden University of Technology from July 2009 to July 2012 where I returned as a faculty member at the Department of Diagnostic radiology and Nuclear Medicine –Faculty of Medicine – JUST.

In 2017 , I was awarded the Board certificate in Pain Management from the American Academy of Procedural Medicine after passing the written and oral examination.

During my academic and clinical work, I was actively involved in teaching neuroimaging lectures for the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> year medical students as well as radiology residents at the Department of Diagnostic Radiology. Furthermore, I'm actively involved in research as well where I have collaboration with researcher from different institutions. We have developed a software to help in computer aided reporting system for lumbar disc herniation from MRI images (SIFT based ROI extraction for lumbar disk herniation CAD system from MRI axial scans). Also, I have supervised a master student to evaluate the effect of ionizing radiation on thyroid gland of radiology workers and compare it with non-radiology workers in the same hospital. In addition, I have collaborated with Department of Biomedical Systems and Informatics Engineering at Yarmouk University to Generate Synthetic-Pseudo MR images from real CT images by mapping the MR image three intrinsic contrast parameters maps with the CT number mean and standard deviation values in the CT image of specific tissues, where the generated three maps are used to simulate the MRI sequence with different weightings depending on the proposed echo and repetition times in order finally to generate the Synthetic MR images and we published many articles in this field. I am also collaborating with researchers from the School of Veterinary Medicine with advanced experiments , we brought for the first time a vascular bundle C-arm fluoroscopic machine inside the animal house and we did cerebral and cardiac angiography for the dogs and we got valuable results about the micro RNAs, and we did many experiments on Rats and published many articles.

I made many research teams with the medical students to teach them everything about research and together we published many articles . We had many novel ideas and novel techniques

The first one was achieved an international record , the title was ( Delayed Endovascular Stenting of Right Subclavian Artery Pseudoaneurysm Caused by Gunshot Accident in a Syrian Refugee: A Case Report ) and published in the Journal of vascular and endovascular surgery, was 17<sup>th</sup> case recorded worldwide.

The second was about the recording of the first case report in the literatures , the title was ( Isolated Retrodental Epidural Hematoma Without Dens Fracture ) and published in the Journal of emergency medicine .

The third was about using simple way to stimulate the nerve dysfunction , the title was( Successful and Complete Recovery of the Ulnar Nerve After Eight Years of Chronic Injury Through Local Steroid Injections: A Case Report ) and published in the Journal of pain and therapy .

The fourth was about a novel technique in treatment of cranial and facial arteriovenous malformations, the first publication as technical strategy and the title was ( Scalp Arteriovenous Malformation Resection With Novel Technique of Endovascular and Surgical Devascularization ), published in the Craniofacial surgery; Then a full article as original research was published in the Journal of Vascular health and risk management and the title was ( Pre-Surgical Endovascular Proximal Feeder Artery Devascularization Technique for the Treatment of Cranial Arteriovenous Malformations ).

The fifth one was a novel result on a research on the MicroRNAs as : Characterizing and Profiling microRNAs in Dogs Undergoing Induced Ischemic Brain Stroke After Middle Cerebral Artery Occlusion Under Fluoroscopic Guidance was published in the Journal of Vascular Health and risk Management 2021.

And the sixth is a novel technique of using a neurovascular and published in the Journal of Endovascular surgery under the title (Successful Use of Neurovascular Plug for Embolization of Scalp Arteriovenous Fistula: A Novel Technique) and it is now eligible to be considered as Patent from the United State of Patent and Trademark Office and waiting for their respectful final decision.

Also I'm now a reviewer for many journal publishing groups , as Journal of the American college of Cardiology, BMC , SAGE , HELIYON and DOVEPRESS.

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## **Education**

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<b>Board Certificate in Pain Management from American Academy of Procedural Medicine</b>	<b>July 2017</b>
<b>Fellow of Diagnostic and Interventional Neuroradiology.</b> Department of Neuroradiology. Faculty of Medicine Dresden University of Technology, Germany. Carl Gustav Carus University Hospital.	<b>July 2009-July 2012</b>
<b>Board Certificate in Diagnostic Radiology.</b> Jordan Medical Council, Jordan.	<b>September 2009</b>
<b>High Specialty Degree in Diagnostic Radiology.</b> Department of Diagnostic Radiology and Nuclear Medicine. Faculty of Higher Education. Jordan University of Science and Technology, Jordan.	<b>July 2004-July 2008</b>
<b>General Practitioner Licensing Examination.</b> Jordan Medical Council, Jordan.	<b>September 2002</b>
<b>Bachelor of Medicine and General Surgery.</b> Faculty of Medicine. Kufa University, Iraq.	<b>1994- June 2001</b>

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## **Professional Experience**

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**Professor of Interventional Neuroradiology**

**March 2023**

Department of Diagnostic Radiology and Nuclear Medicine.  
Faculty of Medicine.  
Jordan University of Science & Technology, Irbid, Jordan.

**Senior Consultant Neurointerventionalist**

**March 2023**

Department of Diagnostic Radiology and Nuclear Medicine.  
King Abdullah University Hospital, Irbid, Jordan.

**Consultant in JFDA committee**

**April 2020- present**

Clinical consultation for new drug Approval  
in Jordan.

**Associate Professor.**

**July 2018-March 2023**

Department of Diagnostic Radiology and Nuclear Medicine.  
Faculty of Medicine.  
Jordan University of Science & Technology, Irbid, Jordan.

**Board Examiner**

**October 2017- 2023**

Arab Board of Health Specializations

**Assistant Dean - Deanship of Student Affairs**

**September 2016-September 2017**

**Assistant Professor.**

**September 2012-July 2018**

Department of Diagnostic Radiology and Nuclear Medicine.  
Faculty of Medicine.  
Jordan University of Science & Technology, Irbid, Jordan.

**General Radiologist.**

**July 2008 -May 2009**

Department of Radiology.  
National Center of Diabetes and Endocrinology , Amman, Jordan.

**Radiology resident Doctor.**

**July 2004-July 2008**

Department Of Diagnostic Radiology and Nuclear Medicine.  
Faculty of Medicine.  
Jordan University of Science & Technology, Irbid, Jordan.

**General practitioner**  
Royal Medical Services, Jordan.

**2002- 2003**

**Intern.**  
Ministry of Health, Jordan.

**2001- 2002**



### **Membership in Professional / Scientific Societies**

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Jordanian Medical Association	<b>2001 to present</b>
The European Society of Neuroradiology	<b>2012 to present</b>
Jordan Society of Interventional Radiology	<b>2018 to present</b>

### **Continuing Education**

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1. LINNC Congress Paris 2022.
2. ESMINT Congress Nice 2022.
3. Advanced Training course in brain Aneurysm treatment Oxford 2022.
4. Scientific Committee for the first Jordanian international conference in Interventional Radiology Amman 2022.
5. Speaker at the first NEUROPEdia conference for medical students at JUST 2022.

### **Workshop Attended**

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1. Statistical Data Analysis using Minitab. Academic Development and Quality assurance Center, Jordan University of Science & Technology. 2017.
  2. Online Learning Design. Academic Development and Quality assurance Center, Jordan University of Science & Technology. 2018
  3. Basics of Distance Education. Academic Development and Quality assurance Center, Jordan University of Science & Technology 2020.
  4. Critical thinking and creative thinking . Academic Development and Quality assurance Center, Jordan University of Science & Technology 2021.
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## Publications in Refereed Journals

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I have more than 50 Publications till now :

- 1. Pre-Surgical Endovascular Proximal Feeder Artery Devascularization Technique for the Treatment of Cranial Arteriovenous Malformations.**  
Vascular health and risk management Journal 2020 .
- 2. Characterizing and Profiling microRNAs in Dogs Undergoing Induced Ischemic Brain Stroke After Middle Cerebral Artery Occlusion Under Fluoroscopic Guidance.**  
Journal of Vascular Health and risk Management 2021.
- 3. Successful Use of Neurovascular Plug for Embolization of Scalp Arteriovenous Fistula: A Novel Technique.**  
Journal of Endovascular Therapy 2021.
- 4. Scalp Arteriovenous Malformation Resection With Novel Technique of Endovascular and Surgical Devascularization: Technical Strategy.**  
Craniofacial Surgery Journal 2019.
- 5. Expressions of heat shock protein 90, inducible nitric oxide synthase, and vascular endothelial growth factor in the skin of diabetic rats.**  
Journal of Veterinary World 2021.
- 6. LiverNet: Diagnosis of Liver Tumors in Human CT Images.**  
Applied Sciences Journal 2022.
- 7. Clinical and electrocardiogram presentations of patients with high serum potassium concentrations within emergency settings: a prospective study.**  
International Journal of Emergency Medicine 2022.
- 8. Effects of Elemental Mercury Vapor Inhalation on Arterial Blood Gases, Lung Histology, and Interleukin-1 Expression in Pulmonary Tissues of Rats.**  
Scientific World Journal 2021.
- 9. Ischemic stroke demographics, clinical features and scales and their correlations: an exploratory study from Jordan.**  
Future Science OA Journal 2022.
- 10. Three-dimensional kidney's stones segmentation and chemical composition detection.**  
International Journal of Electrical and Computer Engineering 2021.
- 11. Impact of COVID-19 lockdown on the incidence and patterns of toxic exposures and poisoning in Jordan: a retrospective descriptive study.**  
BMJ open of BMJ journals 2021.

- 12. The utility of brain CT scan modality in the management of dizziness at the emergency department: A retrospective single-center .**  
Annals of Medicine and Surgery 2021.
- 13. Delayed Endovascular Stenting of Right Subclavian Artery Pseudoaneurysm Caused by Gunshot Accident in a Syrian Refugee: A Case Report.**  
American Journal of vascular and endovascular surgery 2017.
- 14. Isolated Retrodental Epidural Hematoma Without Dens Fracture.**  
Journal of Emergency Medicine 2019.
- 15. Generation of Synthetic-Pseudo MR Images from Real CT Images.**  
Tomography Journal 2022.
- 16. Effects of Elemental Mercury Vapor Inhalation on Arterial Blood Gases, Lung Histology, and Interleukine-1 Expression in Pulmonary Tissues of Rats.**  
The Scientific World Journal 2021.
- 17. Successful and Complete Recovery of the Ulnar Nerve After Eight Years of Chronic Injury Through .**  
Journal of Pain and Therapy 2020.
- 18. Building a simulated educational environment for the diagnosis of lumbar disk herniation using axial view MRI scans.**  
International Journal of Advanced Intelligence Paradigms 2022.
- 19. Prevalence estimates of drug addiction among high-school students and its association with violence, and school behaviors: A cross-sectional study from Jordan.**  
Annals of Medicine and Surgery Journal 2021.
- 20. Asymptomatic Effect of Occupational Radiation Exposure on Thyroid Gland Hormones and Thyroid Gland Ultrasonographic Abnormalities.**  
Journal of Clinical Medicine 2018 .
- 21. The impact of exposure to medical radiation on Lead and thyroid function test.**  
Research Journal of Medical Science 2018.
- 22. Computer-aided diagnosis of lumbar disc herniation.**  
Published in: Information and Communication Systems (ICICS), 2015 6<sup>th</sup> International Conference, Conference paper 2015.
- 23. Endoscopic Intraventricular Atrial Adhesiolysis for the Treatment of Entrapped Temporal Horn after Intraventricular Tumor Surgery,**  
Journal of neurosciences and rural practice 2020 .



- 24. Relationship Between Initial Arterial Blood Gases and Coagulation Profiles – Analyzing the Prognosis and Outcomes in Patients with Multiple Injuries/Trauma.**  
Open Access Emergency Medicine 2020 .
- 25. A snapshot of Ischemic stroke risk factors, sub-types, and its epidemiology: Cohort study.**  
Annals of Medicine and Surgery Journal 2020.
- 26. SIFT based ROI extraction for lumbar disk herniation CAD system from MRI axial scans.**  
Journal of Ambient Intelligence and Humanized Computing 2018.
- 27. Avascular necrosis of the femoral head after single steroid intra-articular injection.**  
European Journal of Orthopaedic Surgery & Traumatology 2019.
- 28. , Utility of leucocytes, inflammatory markers and pancreatic enzymes as indicators of gangrenous cholecystitis.**  
Postgraduate Medical Journal – BMJ Journals 2019.
- 29. Facial Nerve Paralysis after Onyx Embolization of a Jugular Paraganglioma: A Case Report with a Long-Term Follow Up.**  
Journal of Clinical Medicine 2018.
- 30. Modified Bilateral Pi Craniectomy Technique for Reduction Cranioplasty: Novel Technique.**  
Journal of Craniofacial surgery 2019.
- 31. Final Year Dental Students' Perception of Knowledge, Training and Competence in Medical Emergency Management.**  
Global Journal of Health Science 2018.
- 32. Primary Renal Ewing's Sarcoma in a Young Male Treated Completely by Surgical Excision without Chemotherapeutic Agents: Case Report.**  
International Journal of Surgery Case Reports 2019.
- 33. Radiation Dose and Image Quality in Adult Computed Tomography Scans.**  
Journal of Medical Imaging and Health Informatics 2018.
- 34. Incidence, characteristics, and survival trend of cardiopulmonary resuscitation following in-hospital compared to out-of- hospital cardiac arrest in Northern Jordan.**  
Indian Journal of Critical Care Medicine 2017.

- 35. Clivus Intraosseous Meningioma Mimicking Chordoma.**  
Journal of Craniofacial surgery 2019.
- 36. Fallopian tube recanalisation using dedicated radiographic tubal assessment set in angiography suite.**  
Journal of Medical Imaging and Radiation Oncology 2014.
- 37. The Role of Heat Shock Protein 90 in Human Reproduction .**  
Research Journal of Biological Sciences 2014.
- 38. Assessment of genotoxicity of vincristine, vinblastine and vinorelbine in human cultured lymphocytes: a comparative study.**  
Balkan Journal of Medical Genetics 2016.
- 39. The Assessment of Multidetector Computed Tomography.**  
Iranian Journal of Radiology 2018.
- 40. Acute cord reperfusion injury after posterior cervical decompression for chronic posterior longitudinal ligament ossification stenosis.**  
Journal of Turkish Spinal Surgery 2020.
- 41. Azygos Lobe: Prevalence of an Anatomical Variant and Its Recognition among Postgraduate Physicians.**  
Diagnostics journal 2020.
- 42. Delayed Supratentorial Intracerebral Hemorrhage After Posterior Fossa Acoustic Neuroma Surgery.**  
Craniofacial Surgery Journal 2020.
- 43. Building a Simulated Educational Environment for the Diagnosis of Lumbar disk Herniation Using Axial View MRI scans.**  
International Journal of Advanced Intelligent 2018.
- 44. Overexpression of HSP90 in Skin of Diabetic Rats Impacts Wound Healing Process.**  
Research Journal of Biological Sciences 2016.
- 45. Diaphragmatic Lipoma in a Woman with Rheumatoid Arthritis: A Case Report and Literature Review.** American Journal of case reports 2020.

- 46. Nondysraphic spinal intramedullary lipoma: A rare case and management.**  
Turkish Archive of Pediatrics 2021.
  - 47. Ganglioglioma of optic chiasma: A case report and review of literature.**  
Surgical Neurology International journal 2020.
  - 48. Extra-axial cerebellopontine angle cavernoma: A case report and review of literature.**  
Surgical Neurology International Journal 2020.
  - 49. Prevalence, Clinical Characteristics, and Risk Among Patients with Ischemic Heart Disease in the Young Jordanian Population.**  
Open Access Emergency Medicine Journal 2020.
  - 50. Cranioplasty for Skull Defect With Polypropylene Abdominal Wall Mesh.**  
Craniofacial Surgery Journal 2020.
  - 51. Child's Nervous System Ventriculo-femoro-caval shunt: a salvage surgery**  
**Ventriculo-femoro-caval shunt: a salvage surgery.**  
Child's Nervous System journal 2021.
  - 52. An observational study of the occurrence of acute coronary syndrome (ACS) among jordanian patients: Identifying the influence of Ramadan Fasting.**  
Annals of Medicine and Surgery 2020.
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- 1. New Technique in treatment of complex wide neck non giant intracranial aneurysms.**
- 2. Effectiveness of Epidural Injection in lumbar disc prolapse under CTscan guidance.**
- 3. Seasonal Affection on Testicular Torsion.**
- 4. Safety and efficacy of posterior approach for a CT-Guided Cervical epidural injection.**
- 5. Prevalence of Sacoiliitis in women complaining of low back pain.**
- 6. Effectiveness of Epidural Injection in cervical disc prolapse under CTscan guidance.**