PULSUS
WWW.PULSUSCONFERENCE.COM
6th World Congress on
Spine and Spinal Disorders
Spine 2020
April 13-14, 2020 | Dubai, UAE

MEDULLARY AND FORAMINAL STENOSIS BY LUMBAR VERTEBRAL HEMANGIOMA: HOW TO APPROACH?

NERY, B.[1], RIVERO, L.R.[2], CAMPOREZE, B.[1], COSTA, R.AF.[1], PEREIRA, L.C.[1], QUAGGIO, E.[1], FERREIRA, J.P.U.[1]; NERY, C.S.A.[1]

[1]Sociedade Portuguesa de Beneficência Hospital Imaculada Conceição, Ribeirão Preto, SP, Brazil;
[2]Medical School, University of Bristol (UOB), Bristol, Avon, United Kingdom;

Abstract

BACKGROUND: Embolization is the occlusion of a vessel, performed to reduce the internal flow of blood, this has become accepted modality of cancer treatment in patients with various clinical scenarios. The aim of embolization in the treatment of cancer is to form ischemia within the tumor, which eventually results in the necrosis of the tumor.

CASE SERIES AND METHODS: Case report based on the retrospective analysis of the medical record and complementary exams of the patient associated with a literature review of indexed databases MEDLINE, LILACS, SciElo, BIREME, Scopus, PubMED, Cochrane Library.

CASE REPORT: Clinical History: Female patient, 53 years old, progressive axial low back pain, neurogenic claudication, 10/10 visual analogue scale (VAS) pain, associated with L3 and L4 sciatic pain on the left. Patient initially underwent embolization of L3 vertebral hemangioma with slight improvement of axial pain but persisted with VAS 8/10 after embolization. Due to compression of spinal cord canal at L3 level and presence of lesion with foraminal compression of left L3 due to infiltrated pedicle and facet of L3 / L4 and thickened by vertebral hemangioma, it was decided to perform posterior decompression (laminectomy) and foraminal (foraminotomy) to the left. Operating without embolization these cases bleeds a lot so it was important to embolize first. In surgery patient lost 1.5 litters of blood but uneventful due to blood transfusion. Spinal cord decompression, foraminotomy and arthrodesis were performed. The patient is currently without pain.

CONCLUSION: The aim of embolization in the treatment of cancer is to form ischemia within the tumor, which eventually results in the necrosis of the tumor. There is a large amount of bleeding, hence embolization is essential in reducing the loss of blood and decompression to infiltrate foramen and posterior lamina, exactly so as not to interfere with the tumor itself.

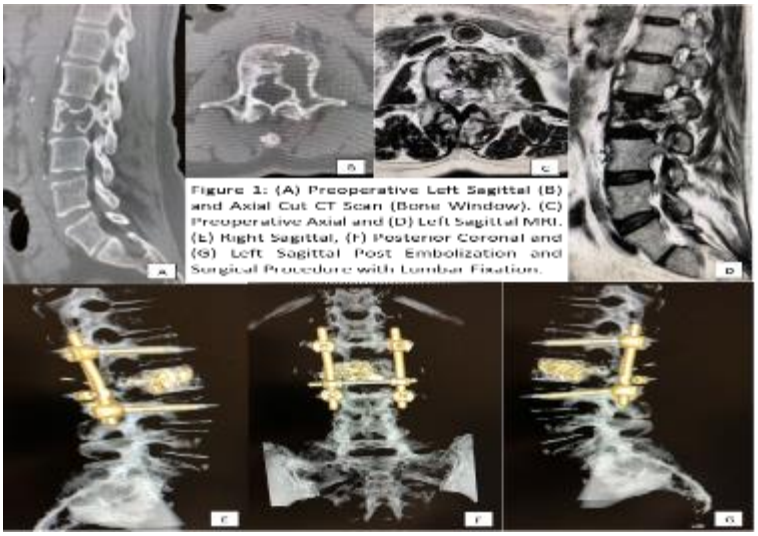


Figure 1: (A) Preoperative Left Sagittal (B) and Axial Cut CT Scan (Bone Window). (C) Preoperative Axial and (D) Left Sagittal MRI. (E) Right Sagittal, (F) Posterior Coronal and (G) Left Sagittal Post Embolization and Surgical Procedure with Lumbar Fixation.

Recent Publications

1. Goode J, Matson M. Embolisation of cancer: what is the evidence? [Internet]. Ncbi.nlm.nih.gov. 2004 [cited 9 December 2019]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1434597/2. Cassidy D, Jarvi K, Grober E. Varicocele surgery or embolization: Which is better? [Internet]. PubMed Central (PMC). 2012 [cited 9 December 2019]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3433543/
3. Tafti D, Cecava N. Spinal Hemangioma [Internet]. Ncbi.nlm.nih.gov. 2018 [cited 9 December 2019]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK532997/
4. Gepstein R, Arinzon Z, Adunsky A, Folman Y. Decompression surgery for lumbar spinal stenosis in the elderly: preoperative expectations and postoperative satisfaction [Internet]. Nature. 2005 [cited 9 December 2019]. Available from: https://www.nature.com/articles/3101857
5. Chen Y, Zhang J, Zou Y, Wu Y. Recent Advances on Polymeric Beads or Hydrogels as Embolization Agents for Improved Transcatheter Arterial Chemoembolization (TACE) [Internet]. Frontiers. 2019 [cited 9 December 2019]. Available from: https://www.frontiersin.org/articles/10.3389/fchem.2019.00408/full



Breno Nery M.D. is a neurosurgeon at Beneficencia Portuguesa Hospital (Ribeirão Preto – Brazil) and PhD student at the Medical School of Ribeirão Preto (Ribeirão Preto – Brazil). He received his M.D. from Universidade Federal de Goiás (Goiânia – Brazil) and did his residency program at Heliópolis Hospital (São Paulo – Brazil). He is interested in General Neurosurgery and specially in Skull Base and Vascular Surgery. Breno had the opportunity to travel the world to learn with the most skilled surgeons in the field. He did his visiting Fellowship in Skull Base Surgery with Professor Madjid Samii (Hannover – Germany) and his Observership focused in Skull Base Surgery and Vascular surgery with Professor Saleem Abdulrauf (Saint Louis – USA). He also did an Observership focused in endoscopic surgery at Brigham and Women's Hospital (Harvard Medical School) under the guidance and orientation of Professor Edward Laws, as with Professor Ossama Al-Mefty focused in skull base pathologies. Breno Nery M.D. was honored with the first place at Brazilians' Board Exam (Brazilian Neurosurgical Society). Dr. Nery authored and coauthored 13 book chapters and 17 per reviewed articles. He is currently a member of the Brazilian Neurosurgical Society and the Walter and Dandy Neurosurgical Society.

Email: *brenonery84@gmail.com, *rr17496@bristol.ac.uk