Carotid blow out syndrome: Interventional radiologic management

Carotid blow out syndrome (CBOS) is a catastrophic neurovascular emergency associated with a high morbidity and mortality (M&M). The etiology of CBOS is: head and neck malignancies with tumor invasion, postoperative complications, inflammation, trauma, vasculitides, collagen diseases, and post radiation therapy for malignancies, among others. The conventional surgical management has been and is carotid artery and/or branch ligation or bypass, and is rather difficult and associated with significant M&M and could be ineffective in controlling the situation. At this time, the ideal management of this serious problem is the interventional radiology (IR) and interventional neuroradiology (INR) endovascular: insertion of stents of different kinds (covered or uncovered, self-expanding or balloon-expandable) and/or embolization of the carotid or vertebral arteries or branches, with temporary or permanent agents and/or devices. A permanent or temporary success is expected with stent insertion and/or embolization, or both procedures combined. We have managed many patients, not considered ideal candidates for surgery, at least during the acute phase, with stents from different manufacturers, mostly covered. In addition, we have embolized some patients as well and some other patients have had both methods. The procedures have been done in the IR suite by the IR, INR and surgeons as well, working in a team, in a collaborative rather than in an adversarial manner. No major complications related to the procedures have been found. The patients have had a long-term or a temporary improvement in their condition. The emergent management of CBOS by stenting and/or embolization or both is a safe, effective and relatively easy procedure to temporarily manage these seriously ill patients. A longer follow-up and many more patients studied are necessary to establish the definitive role of stenting and/or embolization in CBOS. In conclusion, the conventional surgical management of CBOS may be difficult and/or ineffective, therefore, the endovascular management is considered the first choice of therapy, at least for now, especially in clinically desperate situations.

Biography

Jaime Tisnado graduated from Leoncio Prado Military Academy. He received his BM degree from San Marcos National University, College of Sciences. He received his MD degree summa cum laude from the same San Marcos National University Medical School. He was an Intern at GBMC, a division of John’s Hopkins University Hospital in Baltimore, MD, 1965, and then an Intern and Resident in Surgery at The State University of New York, Upstate Medical Center in Syracuse NY, 1966-67. He was a Resident in Radiology for 4 years at Thomas Jefferson University Medical Center in Philadelphia, 1967-71. Then he took 2 years fellowships in Vascular and Interventional Radiology and Neuroradiology both at the same institution, Thomas Jefferson University in Philadelphia, PA, 1971-73. He then became an Assistant Professor of Radiology and Director of Interventional Radiology at Albany Medical College, Albany, NY, 1974-77. Thereafter he moved to Virginia Commonwealth University, in Richmond, VA, where he became Associate Professor of Radiology and Director of Interventional Radiology and eventually became Professor of Radiology and Professor of Surgery, at the same university from 1985 till 2010. Thereafter, he was named one of the few Professor Emeritus of Radiology and Surgery, all at the same Virginia Commonwealth University in 2010 till now. He has published more than 100 articles in peer reviewed journals, about 400 scientific posters and electronic exhibits all over the country and the world, and about 200 abstracts, 4 books, many chapters in books, and about 200 papers presented at meetings, at the local, national, and worldwide level. He has been selected many times to Who is Who in America, the Best Radiologists in America, the Best Physicians in USA, etc. Moreover, he is the only person in the country and in the world who has, at the same time and forever, more than 5 fellowships in the most prestigious professional organizations of USA.

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