

Radiation-Induced Vasculopathy

Joseph R Shiber*

Department of Medicine, University of FL College of Medicine, USA

Submission: February 04, 2017; **Published:** April 06, 2017

***Corresponding author:** Joseph R Shiber, Associate Professor of Medicine, University of FL College of Medicine, Jacksonville, USA,
Tel: 919-244-3981; Email: shiberj@bellsouth.net

Introduction



Figure 1: MRA of Neck showing occlusion of the left common carotid artery, high-grade stenosis (>75%) of the right internal carotid artery, and severe disease of both vertebral arteries.

A 54 year-old man had several months of near-syncope and global weakness occurring typically with walking that worsened after starting antihypertensive medications including a diuretic. He had been treated for Hodgkin's lymphoma, presenting as a nasal mass as a young adult, with chemotherapy and external beam radiation. He had a normal head CT and felt somewhat better after receiving intravenous fluids but his symptoms returned on ambulation. MRI and MRA (Figure 1) of his head and neck showed occlusion of his left common carotid artery, high-grade stenosis (>75%) of his right internal carotid artery, and severe disease of both vertebral arteries; MRI showed numerous

scattered punctate infarctions. We started a Heparin infusion, held all antihypertensive medications allowing for permissive hypertension, and consulted Vascular Surgery for urgent right carotid endarterectomy. His recovery was complicated by post-operative infection but he had no further neurological symptoms at his three month follow-up visit.

Radiation-induced vasculopathy may take years to decades to become clinically symptomatic. Diuretics and vasodilators may worsen cerebral perfusion and exacerbate symptoms potentially leading to stroke [1-5].

References

1. Abayomi O (2004) Neck irradiation, carotid injury and its consequences. *Oral Oncology* 40(9): 872-878.
2. Chu CN, Chen SW, Bai LY, Mou CH, Hsu CY, et al. (2011) Increase in stroke risk in patients with head and neck cancer: a retrospective cohort study. *British Journal of Cancer* 105(9): 1419-1423.
3. Smith GL, Smith BD, Buchholz TA, Giordano SH, Garden AS, et al. (2008) Cerebrovascular disease risk in older head and neck cancer patients after radiotherapy. *Journal of Clinical Oncology* 26(31): 5119-5125.
4. Swisher MCS, Mitra N, Lin A, Ahn P, Wan F, et al. (2014) Risk of fatal cerebrovascular accidents after external beam radiation therapy for early-stage glottic laryngeal cancer. *Head and Neck* 36(5): 611-616.
5. Plummer C, Henderson RD, Sullivan O'JD, Read SJ (2011) Ischemic stroke and transient ischemic attack after head and neck radiotherapy: a review. *Stroke* 42(9): 2410-2418.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: 10.19080/JAICM.2017.02.555582

**Your next submission with Juniper Publishers
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>