THE SOCIETY FOR VASCULAR TECHNOLOGY OF GREAT BRITAIN AND IRELAND

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Personal Reflection:

Management of Radiation Induced Carotid Stenosis in Head and Neck Cancer:

The incident of carotid stenosis post RT is alarmingly high. It was reassuring that the latency period post intervention is higher in this study than on the previous ones.

The main points of interest are -
- The inflammatory reaction of radiotherapy for head and neck squamous cell carcinoma generates or accelerates atherosclerosis.
- RT in patients with HNSCC holds a significant risk factor of developing a carotid stenosis.
- The arterial lesions were found to be multifocal and include stenoses, segmental dilatation and local dissections occasionally resembling fusiform aneurysms. Stenosis was occupying long segments of the arteries.
- Carotid stenting seems to be a preferable treatment for radiation induced stenosis. This is due to
the stenoses exposing classical surgical procedures to major challenges because the risk of surgical intervention is increased due to multilevel inflammation and fibrotic lesions in the arterial wall and the scarring of neck tissue.
- There are divergent opinions regarding the latency period from radiation to symptomatic vascular damage. In the study , the mean interval from RT to symptomatic stenosis was 3-7years and the shortest time was less than 2year.
- No cerebrovascular events occurred in the 24months F/U post stenting.

Vertebrobasilar Artery Calcification:

The study showed an overall prevalence of over 20% in the middle-aged & elderly community-dwelling population. I hadn‚Äôt realised that up to a quarter of all strokes originate from the posterior circulation and that symptoms could include severe locked-in syndromes.

The following points are particularly of interest-
- The prevalence of calcification of the left vertebral artery is significantly higher than on the right.
- The variation in atherosclerotic burden across different arteries may be due to location-specific discrepancies such as vessel-specific genetic differences or anatomical differences in terms of shapes, curves or diameter.
- No association has been found between hypercholesterolemia and VBAC but it has been shown that hypercholesterolemia is one of the strongest risk factors for calcification of the intracranial carotid artery.
- Similar patterns of cardiovascular risk factors were shown for men and women with the exception of obesity. The latter was shown to be a prominent determinant for VBAC in men but

not in women.