Letters to the Editor

Giant cell arteritis of the tongue associated with squamous cell carcinoma

Giant cell arteritis, though most often affecting the temporal artery, is essentially a systemic disorder, extracranial vessels often being affected. Lingual giant cell arteritis is a well recognised nosological entity. The association of giant cell arteritis with mammary carcinoma has been reported, and there seems to be an association between lingual giant cell arteritis and squamous cell cancer.

Our patient, who had no clinical evidence of giant cell arteritis, underwent total laryngectomy and radiotherapy for a squamous cell carcinoma of the vocal cord and epiglottis (T1N0M0). Recurrent tumour necessitated partial and later total glossectomy. The residual lingual segment showed, in addition to irradiation tissular damage, subtotal replacement of its posterior half by a variously differentiated squamous cell carcinoma and a desmoplastic reaction. In one of 28 sections studied, a single artery was affected by the giant cell arteritic lesion (figure). The affected artery was accompanied along its entire course by the carcinoma and, segmentally, the arterial lumen was occluded by malignant cells admixed with and surrounded by leucocytes and macrophages. The arterial intima was thickened by loosely textured collagenous tissue containing fibroblasts, macrophages, lymphocytes and many multinucleated giant cells (figure). The internal elastic lamella was distorted and fragmented throughout the length of the affected artery.

Giant cell arteritis is a descriptive diagnosis for a variety of disorders being associated with a similar histological expression. The temporal arteritis-polyaralgie syndrome constitutes but one entity within this spectrum of granulomatosus vasculitides. In the case reported here, giant cell arteritis was discovered in a tongue heavily invaded by a carcinoma. The reaction in giant cell arteritis, focusing as it does around the internal elastic lamina, means that the latter was possibly injured by one or more factors in our patient: irradiation injury; prior surgical intervention; cancer related direct or indirect effects, and individual susceptibility.

INES MISSELEVITCH
M FRADIS
L PODOSHIN
ESTHER BAREL
JH BOSS
Departments of Pathology and Otolaryngology, Bnai Zion Medical Center, and the Faculty of Medicine, Technion-Israel Institute of Technology, PO Box 4950, Haifa 31048, Israel

References

Small blood vessel disease in allergic granulomatous angiitis (Churg-Strauss syndrome)

The histological aspects of the vasculitis seen in Churg-Strauss syndrome have been reported but do not include changes at the capillary level.

We report small blood vessel ultrastructural changes seen in the muscle biopsy specimen of a 37 year old man who was admitted to hospital for tingling in the fingers, weakness of the wrist extensors, and severe aching pain in the shoulders. There were diminished reflexes in the right upper limb and the reflexes were absent in the lower extremities. The laboratory findings showed 50% eosinophils. Two years before admission the patient had bronchial asthma.

The histological sections from the gastrocnemius muscle showed moderate to pronounced perivascular infiltrates containing histiocytes, plasma cells, and eosinophils. Small interstitial granulomas were present. Some arteries presented foci of fibrinoid necrosis, and occasionally fresh vascular thrombi were evident. Infiltrates with lymphocytes and eosinophils were noticed in the perineurium of small intramuscular nerves.

Electron microscopic examination showed that most muscle fibres were of normal size and regularly shaped. A few atrophic muscle cells with a diameter of only 4 μm were

Figure Nests and cords of poorly differentiated squamous cell carcinoma adjacent to the affected artery. The thickened arterial intima contains mononuclear inflammatory and giant cells.

Fig 1 The thin endothelial wall (C) of a small capillary is enveloped by an extremely wide basement membrane.