

Subclavian vein compression in anaplastic carcinoma of the thyroid

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Abstract

Anaplastic thyroid cancer is a condition with a dismal prognosis in most cases. We present a case of subclavian vein compression in a case of anaplastic thyroid carcinoma treated with subclavian venous stenting. Subclavian vein compression is a recognized complication in disseminated carcinomatosis particularly in carcinoma of the breast and bronchus. It has never been described in anaplastic thyroid carcinoma.

Key words: Thyroid Neoplasms; Subclavian Vein; Venous Pressure

Case report

An 84-year-old woman was seen in the clinic with a two-month history of a hoarse voice, coughing and weight loss. She also complained of swelling of her left forearm with functional difficulty.

Clinical examination revealed a mass in her left neck extending into her anterior mediastinum. A contrast-enhanced computed tomography (CT) scan showed the presence of a mass lesion at the thoracic inlet with displacement and distortion of adjacent vessels and trachea. This was confirmed as extracapsular medullary carcinoma thyroid on fine needle aspiration (FNA) and cytology. A fortnight later, the lady presented with a 24-hour history of a swollen left arm. Examination revealed marked pitting oedema. An urgent subclavian venogram was carried out via a cephalic vein approach. This revealed

severe compression of the subclavian vein (Figure 1(a)) and was treated by insertion of two Wall stents under fluoroscopic control (Figure 1(b)). This resulted in rapid resolution of oedema and return of function. Due to the advanced nature of the disease, the patient's condition was managed palliatively and two months later she died.

Discussion

Anaplastic carcinoma of the thyroid is a rare form of thyroid cancer accounting for about three per cent of all thyroid malignancies. It is an aggressive disease and death occurs within a year of diagnosis in 90 per cent of patients. The patient usually presents late with a fixed mass in the neck surrounding the trachea and infiltrating local structures. Stridor, dysphagia, recurrent laryngeal nerve palsy and pain are very common.¹

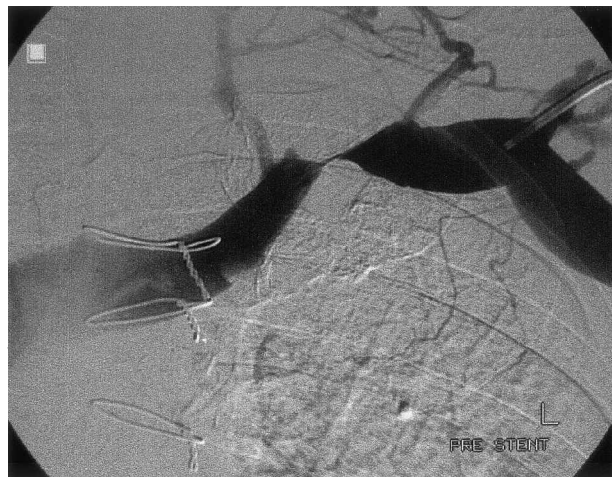


FIG. 1(a)

Catheter venogram, demonstrating near occlusion of left subclavian vein due to extrinsic compression.



FIG. 1(b)

Completion venogram showing stents in position with mild residual stenosis.

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Subclavian vein compression is a very rare presentation of thyroid cancer. It is a well-known complication in disseminated carcinomatosis especially in bronchial and breast cancers. It has never been described in anaplastic thyroid carcinoma. Three cases of great cervical vein thrombosis have been described in the literature but these were due to frank venous invasion and occurred in differentiated thyroid malignancies.²

In anaplastic thyroid carcinoma, curative surgery is almost never feasible once extracapsular spread has occurred. For the majority of patients, biopsy followed by palliative radiotherapy is all that is indicated.⁴ While not much could be offered to the patient in terms of active treatment, stenting the subclavian vein, although an invasive procedure, resulted in significant improvement in quality of life. Although stent insertion carries potential risks and complications, they are in most instances fairly straightforward to insert.^{4,5}

In spite of the fact that anaplastic thyroid cancer carries a dismal prognosis, we feel that our case illustrates that active, and sometimes invasive palliation carries significant benefits for the patient.

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