mixture has little to commend it in clinical practice (Telford and Keats, 1961; Campbell *et al.*, 1965).

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MEDICAL MEMORANDA

Cervical and Mediastinal Fibrosis Presenting with Thyroid Swelling

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A woman presenting with a thyroid swelling was found to be suffering from cervical and mediastinal fibrosis. The aetiology and association with other conditions are discussed.

Case History

Twenty years before the present admission the patient had been investigated for thyrotoxicosis, and a small hard thyroid swelling had been noted. Now 52 years old she complained of hoarseness of the voice, a feeling of pressure on the throat, and occasional dysphagia and dyspnoea. On examination she was found to have a large non-toxic nodular goitre with retrosternal extension confirmed by *X*-ray examination. Results of blood tests, including protein-bound iodine and thyroid antibody tests, were all normal, and thyroid scan showed only two small areas of functioning tissue. Indirect laryngoscopy showed a paralysed right vocal cord.

At operation on 13 March 1969 initial appearances suggested thyroid carcinoma, but it was found that the right lobe could be enucleated from a bed of dense fibrous tissue which extended into the mediastinum. Most of this and the left lobe was removed and the resultant fixed-walled cavity drained. Histological examination showed a simple goitre in which the capsular tissues were infiltrated with inflammatory cells including many plasma cells, and there were some similar scattered deposits in the gland. Lymph nodes showed reactive hyperplasia only.

One month after discharge the patient complained of increasing dyspnoea, and examination showed venous congestion of the right side of the neck, and mild ptosis of the right lid. A hard mass could be felt extending from neck to sternum. Tomograms showed a large swelling extending into the mediastinum and compressing the trachea, but the barium swallow was normal. Sedimentation rate was raised from 13 to 57 mm, there was an increase in the gammaglobulin protein fraction, but no gastric or thyroid autoantibodies could be detected.

At bronchoscopy the right vocal cord was still paralysed and the trachea was rigid and compressed from the right side, the mucosa being congested down to the carina, beyond which it was normal. At thoracotomy the apex of the lung was found to be adherent to a hard pale mass extending from the thoracic inlet and engulfing the superior vena cava and lung surface. A line of cleavage was made between lung and mediastinum, further surgery being considered too hazardous. Histological examination showed dense fibrous tissue with prominent vessels and patchy inflammatory cell infiltration. As no thyroid tissue was present a diagnosis of mediastinal fibrosis was made.

Postoperatively the patient was started on prednisolone 30 mg daily with some improvement in venous pressure in the neck. Over the following year she remained in reasonable health with only slight dyspnoea and hoarseness. When last seen venous pressure was only slightly raised and she was taking prednisolone 15 mg daily.

Comment

Mediastinal fibrosis associated with and antedating retroperitoneal fibrosis has been reported (Tubbs, 1946; Calne *et al.*, 1966) but cervical fibrosis has not been mentioned. The present patient had no clinical evidence of the retroperitoneal condition. Renal function was normal but intravenous pyelography showed minor clubbing of the calices on the right. At hysterectomy two years previously no abnormal retroperitoneal tissues had been observed. There was also no history of methysergide therapy.

The simple goitre was probably incidental to the fibrosis, but as the microscopical appearances of mediastinal fibrosis have been compared with those of Riedel's thyroiditis and other fibrosing conditions (Barrett, 1958) and a common inflammatory aetiology has been suggested I wonder if this is a way along which Riedel's thyroiditis could have developed.

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