# Chondroma of larynx

By K. D. GUPTA (Lincoln)

A STOREMAN, Mr. W. R., aged 64 years, was admitted on 27 February 1968, to a Medical Ward of the Nottingham General Hospital with a 5 month history of:

(a) Tightness across the chest with pain referred to the right arm.
(b) An unproductive cough.
(c) Shortness of breath.
(d) Hoarseness.
(e) Dysphagia.

His symptoms had been getting worse during the last 4 to 6 weeks with increasing shortness of breath for 48 hours. At the time of admission, he was seen to be orthopnoeic and cyanosed, with raised jugular venous pressure. On auscultation of his chest, rhonchi were heard in all areas. Pulse—140/min. Resp.—24/min. Temp.—98 °F. Blood pressure 130/90.

The provisional diagnosis was acute left ventricular failure due to ischaemic heart disease or possibly neoplasm of lungs.

The following investigations were done during the night:

Electrocardiogram—Sinus tachycardia.

X-ray of chest—Clear.

He was treated on admission with intravenous Lasix, Digoxin orally and Penbritin systemically, without any improvement.

On the following morning he was referred to the E.N.T. Department.

At that time the patient had a marked expiratory stridor. Indirect laryngoscopy revealed a bulge below the vocal cords on the right side. Soft tissue X-ray of the larynx and trachea revealed a rather ill-defined mass appreciably narrowing the lumen of the lower part of the larynx.

Soon after he was seen low tracheostomy was carried out under a local anaesthetic. The patient's dyspnoea was so marked that the operation had to be done with the patient sitting up.

Tomography of the larynx was then carried out which defined the outline of the mass more clearly (Fig. 1). A ciné barium was also arranged which was reported as follows:

'There was gross aerophagy with gaseous dilatation of the lower oesophagus together with the whole intestine. The laryngeal distortion above the tracheostomy is demonstrated. No other abnormality was seen on the screen.'

On 1 March 1968, direct laryngoscopy was carried out under general anaesthesia. This revealed a hard rounded tumour in the subglottic region, markedly reducing the laryngeal lumen. The mucosa was smooth, intact, with no ulceration. At the lower end, a whitish area of the tumour was visible. A piece was removed with some difficulty for biopsy.

*Report.* Section shows the biopsy to consist mainly of cartilage with some



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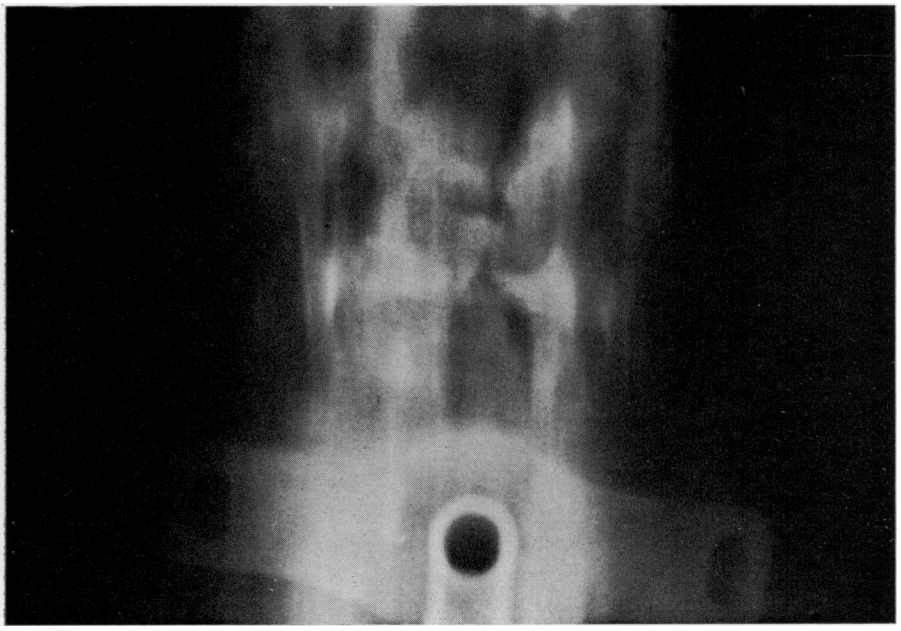


FIG. 1.
Tomograph of Larynx. Subglottic tumour of the right side.

calcification and slight ossification. This cartilage is not obviously neoplastic and certainly there is no evidence of malignancy. The covering epithelium was normal.

Despite the equivocal histology report, a clinical diagnosis of chondroma was made, and its removal was decided upon.

**Operation**

A laryngofissure was carried out under general anaesthesia on 20 March 1968. The thyroid, cricoid and the first ring of trachea were divided vertically in the mid-line. Retraction of the wound exposed the tumour (Fig. 2) which was seen to be a smooth, rounded, slightly glistening mass, firm in consistency, below the right vocal cord. A cuff of mucous membrane was reflected from the surface of the tumour which was seen to be arising from the right half of the posterior plate of cricoid cartilage. There was a thin layer of capsule over the tumour which, however, was incomplete and hence enucleation was not possible. The interior of the tumour was seen to be filled up with translucent, finely trabeculated substance, rather reminiscent of the interior of a 'meringue'. The tumour was removed by morcellation with careful clearance of its edges. The base of the tumour was curetted off until the firm, healthy cartilage of the posterior plate of the cricoid was felt. The mucosal flaps were replaced leaving a small raw area in the subglottic region. The wound was closed in layers.



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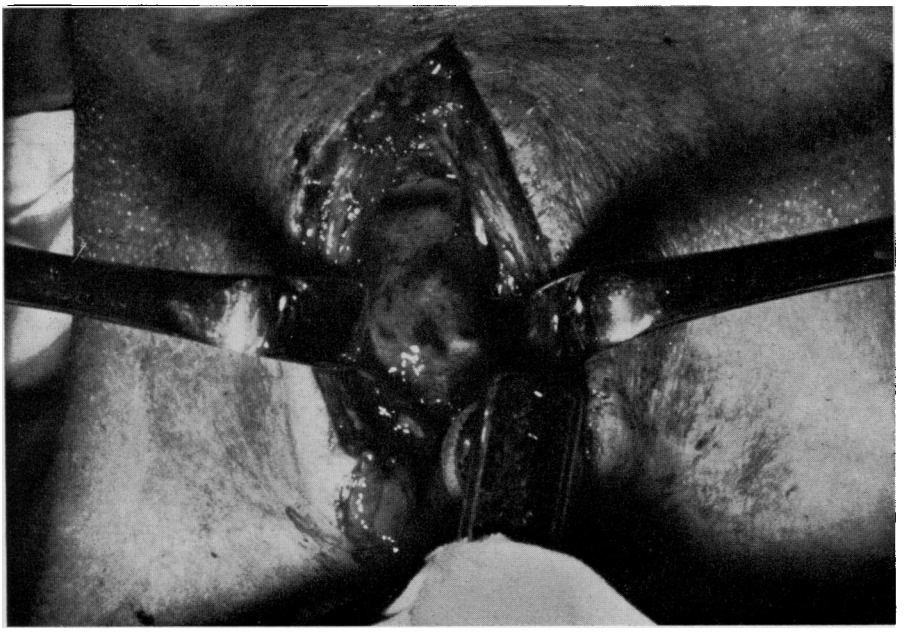


FIG. 2.
The tumour exposed at operation.

### Clinical aspects

*Histology report of the specimen*. The specimen consists of multiple fragments, mostly tiny but including pieces up to 2 cm. in maximum extent. The fragments consist of translucent tissue of cartilaginous appearances with some yellowish, gritty areas.

Sections show pieces of chondroma composed of well differentiated inactive looking cartilage. Calcification or bone formation is evident in a few areas. There is no evidence of malignancy (Fig. 3).

The post-operative period was uneventful. The tracheostomy tube was removed on 26 March 1968. He was discharged from hospital on 2 April. He has been seen in the follow-up clinic since his discharge and is doing very well. His voice is still slightly gruff but serviceable and he has no dysphagia. Indirect laryngoscopy showed that both cords were moving freely with a normal subglottic region.

### Acknowledgements

I am much indebted to Mr. J. F. Neil under whose care the patient was managed, for his permission to publish this case report and for his guidance and helpful suggestions.

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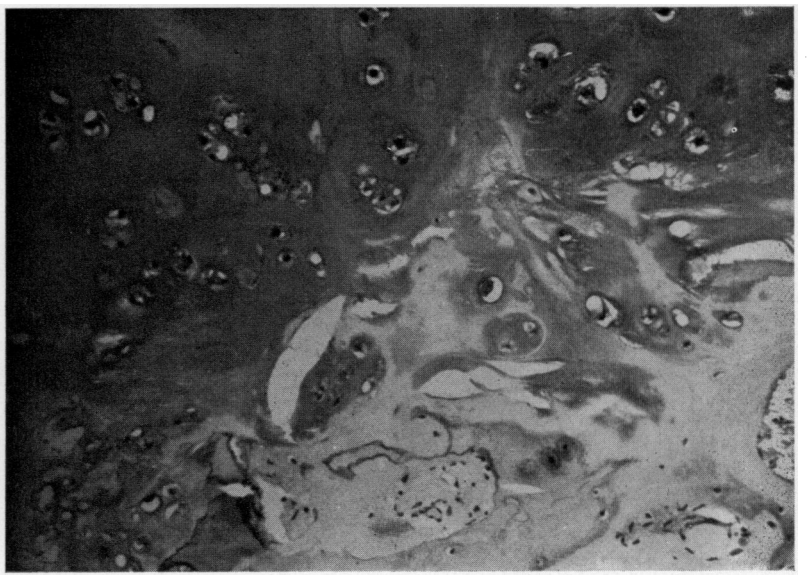


FIG. 3.
Photomicrograph of the tumour stained with haematoxylin and eosin, × 150.

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