of "concussion" or "shell" deafness. It is a pity that the patient
would not at first permit an examination of the vestibular apparatus
by the caloric test, but there was no Rombergism and no sponta-
neous nystagmus, and it is well known that the vestibular
is much more resistant than the cochlear apparatus. This is
attributed to its being much older from the point of view of
comparative anatomy. It is doubtful if treatment does much
good in these cases, though pilocarpine injections are strongly
recommended by some writers. The patient refused to undergo
this treatment, as her circumstances were such that she did not
want to be laid up in bed even for the shortest period. Complete
rest of body and mind, combined with time and patience, are of
more importance than galvanic currents, pilocarpine, strychnine
or other drugs.

FATTY TUMOUR OF THE HYPOPHARYNX
OBSTRUCTING THE LARYNX.

By J. S. FRASER, F.R.C.S.

H. H., male, aged 76, was first seen on 29th September 1915.
He stated that for two years he had had increasing difficulty in
getting his breath, and had also noted an alteration in his voice.
Eighteen months ago he had had an operation on his throat by
indirect laryngoscopy, and had been easier for a time thereafter.
The dyspnœa, however, had soon returned, and of late the patient
had found that he had to lie at night on his left side in order to
get breath. If he turned on his right side he began to choke. At
the time of his visit the patient complained of an aching feeling
in the left side of his throat and stated that of late he had had
difficulty in swallowing, and occasional choking attacks due to
fluids going the wrong way. For the last two months the dyspnœa
had been much worse.

On examination one noted that the patient breathed in a very
noisy manner, as if he were suffering from marked laryngeal
obstruction, while his voice had a very guttural character. The
nose, fauces, and oro-pharynx were quite normal, and there were
no enlarged glands in the neck, but the patient had a lemon-
yellow colour, and with the history of hoarseness, dyspnœa, and
dysphagia one feared malignant disease of the larynx in a man
of 76. Laryngoscopy, however, showed not a cancerous growth
but a large, lobulated, yellowish-pink tumour, apparently growing
from the left lateral wall of the pharynx and the left aryteno-
epiglottic fold (Fig. 1). The tumour hung down into the upper
aperture of the larynx and moved to a limited extent on respiration, being sucked further into the larynx during inspiration and blown out again during expiration.

The forefinger was introduced, and easily reached the upper surface of the growth, which felt extremely soft. Palpation, therefore, confirmed the opinion one had formed from inspection—namely, that the tumour was a fatty one.

10th October 1915.—Operation.—Morphia (¼ gr.) and atropin (¼ 1/100 gr.) were given hypodermically at 9.30 A.M. At 10 A.M. the pharynx and larynx were sprayed with 10 per cent. cocain. Soon afterwards the patient was placed in the supine position (Fig. 3) on the operating table to which the suspension laryngoscopy apparatus (Fig. 4) had been attached. The patient’s head was brought well beyond the edge of the table, and was allowed to hang down, being supported by an assistant. The tongue spatula was then fixed on to the suspension hook, and, after the patient had put out his tongue, introduced as far as the epiglottis. There was considerable difficulty in getting the gag to act well as the patient was quite edentulous. After this difficulty had been overcome, by placing a pad of cotton-wool beneath the tooth-piece of the instrument, the suspension hook was attached to the cross-bar, and the screws adjusted so as to obtain the best possible view of the hypopharynx and larynx. The ordinary standard lamp and forehead mirror provided the illumination. Cocain was again applied to the hypopharynx and upper aperture of the larynx. The tumour was then grasped with specially long forceps designed for removing foreign bodies from the oesophagus. Over this the loop of the cautery snare was passed so as to surround the tumour as near to its base of attachment as possible. (It was found that the growth had a much broader pedicle than had been supposed.) The main mass of the growth was removed by two applications of the cautery snare, though on each occasion it took about five minutes to burn through the tumour. It was now found that there was a small, slender, pedunculated growth arising from the posterior wall of the hypopharynx, and quite separate from the large tumour. This growth was easily removed with the cautery snare. Strong cutting forceps were next used to remove the stump of the original tumour, and finally the cautery was applied to stop all bleeding. The operation, which was only expected to last half an hour, extended to fully an hour, but the patient stood it remarkably well in spite of his advanced years.
Fatty Tumour of the Left Lateral Wall of the Pharynx and Upper Aperture of the Larynx as seen by Indirect Laryngoscopy. The tumour occludes almost entirely the entrance to the larynx.

Fig. 2.—Larynx as seen by Indirect Laryngoscopy Ten Days after the Removal of the Growth. Note the raw surface on the false cord, aryepiglottic fold, and lateral wall of pharynx on the left side.

Fig. 3.—Suspension Laryngoscopy.

The tongue spatula has been inserted and adjusted, the suspension hook placed in position, and the mouth-gag opened. The counter-pressure apparatus has been applied to the larynx externally. The operator is seated and wears the Kirstein forehead light. Cocaine is being applied to the larynx under the guidance of direct vision.
Progress.—At 6 p.m. on the day of operation the pulse was 80 and the temperature normal. There had been no haemorrhage or vomiting, but the patient complained greatly of sore throat. The patient was sitting up, and his breathing was much easier. The
next day the patient's temperature rose to 99° F., but he had had a fairly good night, and was able to take beef-tea. On the following day the temperature rose to 100° F., and the patient stated that during the night he had been considerably bothered by phlegm. His dyspnea had now entirely disappeared and his voice was only slightly thick. He complained somewhat of pain shooting up to the left ear. (This was evidently a referred pain from the pharynx, as the left ear was normal on examination.) Ten days after operation the patient was able to get out. He could swallow with very little difficulty and stated that he slept well. The laryngoscopic appearances at this date (20th October) are shown in Fig. 2.

The writer is indebted to Dr. James Dawson for the following report on the tumour:—A transverse section of the tumour near its distal end (Fig. 5) shows it to be composed almost wholly of fibrous tissue. This has a lobular arrangement. Each lobule consists of well-formed collagen bundles, running longitudinally or irregularly, with comparatively few cells between the bundles (Fig. 7a). In certain more or less defined small areas there is a more open and more cellular structure; here the cells have well-defined branching processes and the intercellular tissue is more fibrillated (Fig. 7b). Other lobules show a distinct myxomatous tissue in which the cells are large, protoplasmic, and branching, and the fibrils are separated by a kind of oedema (Fig. 8). In such areas appear fat-cells isolated or in small groups (Fig. 9), and this change may continue till the myxomatous lobule has been replaced by a fat-lobule (Fig. 10). Throughout the tissue are small blood-vessels with distinct and well-formed walls. This portion of the tumour is surrounded by an epithelial capsule formed of three or four layers of stratified epithelial cells (Fig. 5), all of which have become very flattened by the pressure of the growing tumour.

The proximal portion of the growth may be looked upon as a lipoma in which the fibrous septa are well developed (Fig. 6). The structure is that of ordinary fatty tissue; it consists of connective-tissue cells distended with fat, with the nucleus pushed to the periphery, and with a thin rim of protoplasm remaining around the fat-globule. Amongst these fat-cells are found myxomatous, branching, uninfiltated cells; the blood-vessels are more numerous and have well-defined walls. The original epithelial capsule has become so thinned out that only débris of squamous epithelial cells can be recognised.

A study of different portions of the growth leaves the impres-
Fig. 5. - Transverse Section through Distal Portion of Growth, Showing the Fibrous Tissue, the Islets of Myxomatous Tissue, and the Lobules of Fatty Tissue. Note also the epithelial capsule. (Hematoxylin and eosin x 3 diam.)

Fig. 6. - Transverse Section through Proximal Portion, Showing its Lipomatus Structure with Septa of well-developed Fibrous Tissue. (Hematoxylin and eosin x 3 diam.)

Fig. 7. - Section to Show (a) the fully-formed Fibrous Tissue with small Cell Elements and Collagen Fibres; (b) a more open and more cellular structure, transition to Fig. 4. (Hematoxylin and eosin x 350 diam.)

Fig. 8. - Islet of Myxomatous Tissue with Central Vessel; Star-shaped Cells with branching processes. (Hematoxylin and eosin x 350 diam.)

Fig. 9. - Islet of Myxomatous Tissue in which the Myxoma Cells have been largely replaced by Fat Cells. (Hematoxylin and eosin x 350 diam.)

Fig. 10. - Lobule of Lipomatous Tissue with Septa of fully-formed Fibrous Tissue. (Hematoxylin and eosin x 150 diam.)
sion that here we are dealing with a fibroma which is becoming myxomatous, and this myxoma in turn is becoming lipomatous by a gradual distension of the branching cells with droplets of fat. The small isolated tumour consisted of fibrous tissue covered by squamous epithelium.

*Remarks.*—From the point of view of development the upper aperture of the larynx should be regarded as part of the pharynx, and for this reason the writer has described the case as one of tumour of the hypopharynx. Fatty tumours of this region are rare, though in 1889 M'Bride published in this *Journal* clinical notes of two cases of fatty tumour of the larynx which he had operated on within eighteen months. After a careful search of the literature M'Bride could only find records of three other cases. The ages of these five patients varied from 13 to 71 years. The tumours, if we may class them together, sprang from the region of the epiglottis, glosso-epiglottic fossae, base of the tongue, ary-epiglottic fold, and pyriform fossa, much as in the present case. M'Bride calls attention to the slight symptoms produced by these large growths, and remarks that, unless removal be complete, rapid recurrence takes place. Such may be the case in the present instance, though the method of suspension laryngoscopy briefly described and illustrated above gave excellent access to the growth. The slight amount of haemorrhage did not obscure the view as the blood ran down into the nose and nasopharynx, which in suspension laryngoscopy forms the lowest part of the upper respiratory tract.

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**A CASE OF CLEIDO-CRANIAL DYSOSTOSIS.**

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I AM indebted to Professor Kynoch for the opportunity of examining this patient and for permission to publish the case, and to Dr. G. A. Pirie for the radiograms.

J. L., an unmarried woman aged 47, a weaver to trade, was referred to Professor Kynoch in February 1915, suffering from a uterine prolapse of 14 years' duration. She had never borne children and there was no apparent cause for the prolapse. There was some retroversion of the uterus. She had a degree of varicose veins in both lower limbs, a left inguinal hernia, and a small subcutaneous fibroma about an inch and half to the right of the anus. There was a slight deformity