FIBROSARCOMA OF TONSIL

By S. P. POPLI (Bikaner, India) and M. M. L. ARORA (Chandigarh, India)

MALIGNANT tumours of the tonsils represent about 12 per cent. of the patients with oral cavity tumours. Carcinomas are more common than sarcomas. Leonardelli *et al.* (1960) had 104 cases of sarcoma out of a total of 376 cases of tonsillar malignancy. Out of these ninety-seven were reticulo-sarcomas. However, fibrosarcomas of the tonsil are very rare. Christiansen *et al.* (1951) described one case of fusocellular sarcoma of the tonsil and reported two cases in the literature. Stout (1962) reported one case of fibrosarcoma of the tonsil which was detected 5 weeks after tonsillectomy.

Case Report

K.D., 30-year-old female, was admitted to the otolaryngologic service of the hospital attached to the Institute of Postgraduate Medical Education and Research, Chandigarh on *15 September 1965* with the complaints of a mass on the right side of throat, foreign body sensation and difficulty in swallowing for the last 3 months. She also had some alteration in the voice. There was no history of pain, cough with expectoration, haemoptysis, hoarseness, loss of weight or any glands in the neck.

Past History

Patient was admitted in this hospital with exactly similar complaints about $2\frac{1}{2}$ years back. Local examination at that time revealed unilateral enlargement of right tonsil which was firm and smooth. It was removed by dissection method and histopathology (Fig. 1) showed essentially a fibromatous tumour with formation of well developed fibrillar material, cells arranged in whorls and nuclei having a tendency to be seen in pallisades. Patient made an uneventful recovery.

Personal and Family History

Non-contributory.

Examination

On examination she was found to be an average built lady. Systemic examination revealed no abnormality. On local examination there was found to be smooth, lobular mass about 4 cm. $\times$ $2\frac{1}{2}$ cm. with intact mucosa in the right palatine fossa. This was greyish white in colour and showed no pulsations. On palpation the mass was found to be firm and non-tender. Anterior and posterior pillars were recognizable. Rest of E.N.T. examination was within normal limits. There was no gross lymphadenopathy.

https://doi.org/10.1017/S0022215100067025 Published online by Cambridge University Press

Investigations

Blood and urine—normal.

X-ray chest—normal.

A provisional diagnosis of recurrence of fibroma was made.

Treatment

The growth was removed by dissection method under general anaesthesia. The peritonsillar area was infiltrated with adrenaline solution 1 : 100,000. The tumour came out in two separate masses. Lower part of the growth was quite adherent and dissection was difficult. Fibres of superior constrictor muscle

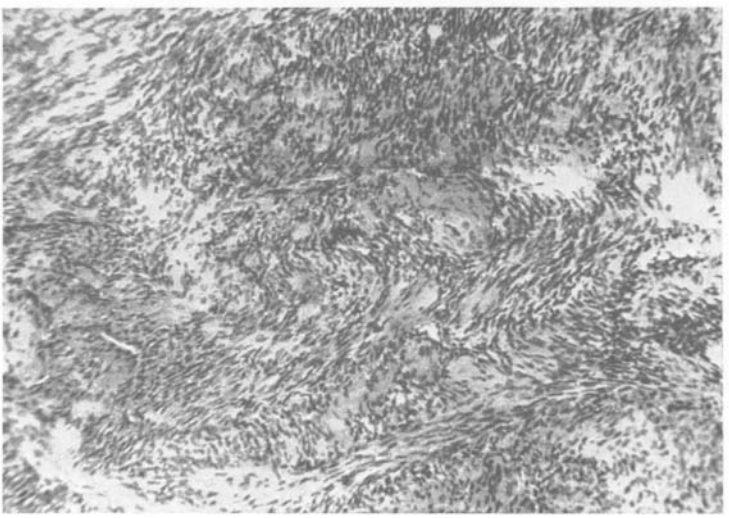


FIG. 1.

Shows typical features of benign fibromatous tumour with well-developed fibrillar material nuclei seen in pallisades.

were seen lying bare. Total blood loss was about 100 ml. There did not seem to be any gross infiltration into the muscle. Patient made an uneventful recovery. Histopathology of the specimen revealed a completely different picture in the two pieces removed. One showed characteristic features of the hyperplasia of the lymphoid tissue and other part (Figs. 2 and 3) showed three circumscribed foci of tumour tissue which consisted of plump looking cells, spindle in nature with fair number of mitoses and scanty collagen. At least in two areas the tumour cells were seen infiltrating into the surrounding muscular tissue. In the post-operative period patient was given deep X-ray therapy and received a total dose of 4,000 r. units.

Discussion

The case is interesting as it represents a malignant change in the recurrence of the fibroma of the tonsil. Although Stout (1962) found it difficult to assign

https://doi.org/10.1017/S0022215100067025 Published online by Cambridge University Press

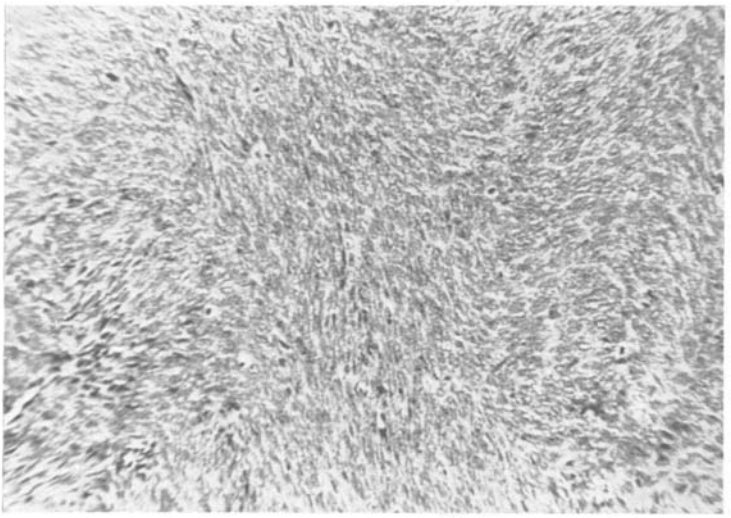


FIG. 2.

Low power view. Shows increased cellularity and hyperchromatic nuclei.

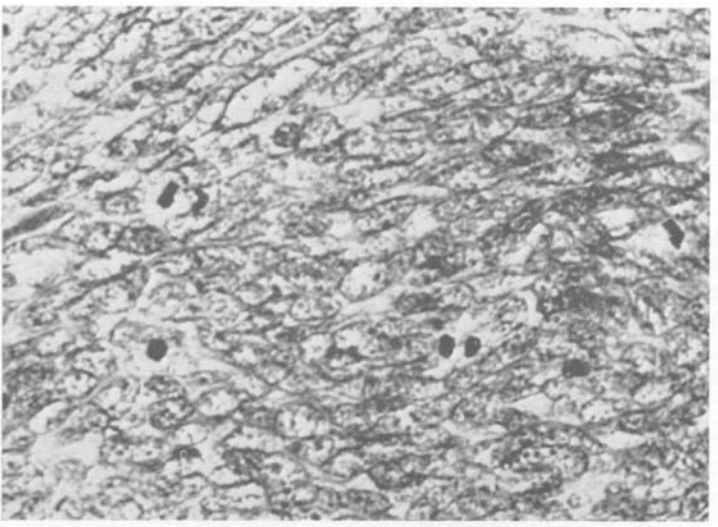


FIG. 3.

High power. Shows plumpy looking cells with mitotic figures.

https://doi.org/10.1017/S0022215100067025 Published online by Cambridge University Press

definite histological features for benign and malignant fibromatous tumours his description "that cells are well differentiated, with no evidence of metaplasia and rare or no mitoses and there is considerable reticulin separating the tumour cells" of the benign fibromatous tumour leaves no doubt about the malignant transformation in the present case. Definite reduction in the collagen tissue, fair number of mitoses and infiltration into the surrounding muscular tissue are characteristic features of the second specimen. Another outstanding feature is the complete absence of lymphoid tissue in the tumour area. It is possible that the tumour arose from the sheath of the superior constrictor muscle and displaced the tonsillar tissue upwards.

Pre-operatively on clinical grounds the tumour was not considered to be malignant. Difficulty was experienced in excising the tumour and marked fibrosis was noticed but this was attributed to the previous operative interference. Macroscopically no growth was seen infiltrating the muscle and as such the procedure was limited to local excision. Soft tissue fibrosarcomas are radio-resistant (Stout, 1962). Radiotherapy in this case was favoured because of the histological diagnosis and the simple excision which was carried out on the assumption of its being benign. Patient is free from the local or distant metastases for the last 7 months.

Summary

A case of fibrosarcoma of the tonsil is described. It occurred at the site of removal of a benign fibromatous tumour $2\frac{1}{2}$ years back. The growth was excised and patient given a course of irradiation.

Acknowledgments

Thanks are due to Dr. Y. N. Mehra for permission to publish the case. We are grateful to Dr. Dutta of pathology department for histopathological opinions given.

REFERENCES

CHRISTIANSEN, H., MANNICHE, N. E., and MENCK-THYGESEN, P. (1951) *Acta oto-laryng.* (*Stockh.*), **39**, 357.

LEONARDELLI, G. B., MAGRI, M., and PIZZETTI, F. (1960) *Tumori*, **46**, 366.

STOUT, A. P. (1962) *Cancer* (*Philad.*), **15**, 1028.

S.P. Medical College,
Bikaner, India.

https://doi.org/10.1017/S0022215100067025 Published online by Cambridge University Press