The Journal of Laryngology and Otology
April 1985. Vol. **99.** pp. 397–398

Co-existing tuberculosis and malignancy in the maxillary sinus

by

VED VRAT,* P. S. SAHARIA† and M. NAYYER‡ (New Delhi, India)

Reports of affection of the maxilla with tuberculosis and separate reports of carcinoma of the maxilla (Page and Jash, 1974; Kukreja *et al.*, 1977; Jain *et al.*, 1979; Harrison, 1973; Ahmad *et al.*, 1981) have often appeared in the literature; but reports regarding simultaneous primary affection of the maxilla with both these pathologies have not been reported. A case with such a combined lesion in the maxilla and its draining nodes is being reported in view of its rarity.

Case Report

Patient S., a 50-year-old female, presented with a gradually increasing swelling of the right side of the face and neck for the previous 3 months. She had right nasal blockage and occasional epistaxis; she was gradually losing weight. On examination there was a soft swelling of the right cheek, the gingivo-labial sulcus was obliterated and a mass was seen in the right nostril. Posterior rhinoscopy did not reveal any pathology.

The infraorbital margin was sharp and the patient had no trismus. The teeth were normal. The lymph nodes in the right upper deep cervical region were enlarged and the matted mass of glands was firm-to-hard to feel.

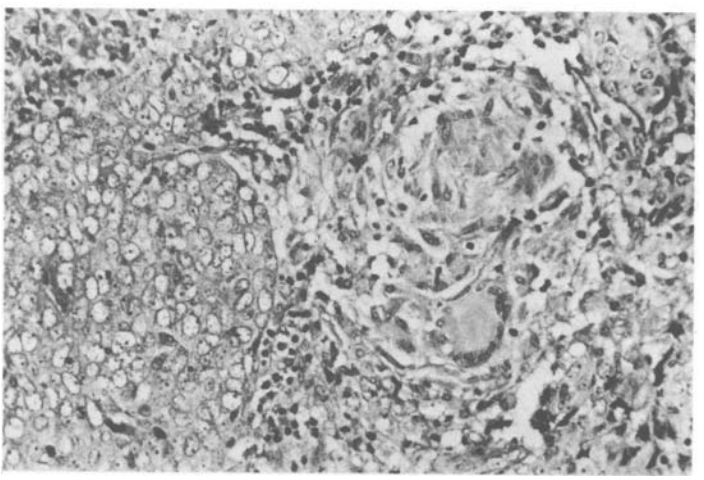


FIG. 1

Photomicrograph of section from the lymph node showing TB granuloma with epithelioid and Langhan's giant cells. Next to the granuloma is a large sheet of malignant cells with vesicular nuclei interspersed with a few mature lymphocytes.

* Senior Resident ENT Safdarjung Hospital, New Delhi.
† Senior ENT Specialist, Safdarjung Hospital, New Delhi.
‡ Pathologist, Safdarjung Hospital, New Delhi.

https://doi.org/10.1017/S0022215100096924 Published online by Cambridge University Press

An X-ray of the sinus revealed haziness and expansion of the sinus, but there was no bony erosion. The ESR was 35 mm in the first hour and a X-ray chest was within normal limits.

A provisional diagnosis was made of malignancy of the maxilla with secondaries in the neck.

A biopsy was taken from the maxillary sinus through the right nostril and later through a Caldwell-Luc approach and this was reported as tuberculosis of the maxillary sinus. A biopsy from the lymph node was also taken which revealed metastatic malignancy with tuberculosis (Fig. 1). This prompted us to take a deeper biopsy from the maxillary sinus and this showed double pathology in the maxilla as well.

The patient was put on antitubercular treatment for 6 weeks. The mass in the neck and cheek subsided to a great extent and the lymph nodes could be felt separately and were found to be hard and mobile. The patient was exposed to 6,000 Rads of Cobalt 60 over a period of 5 weeks, and the nasal mass and lymph nodes regressed in size. At the last follow-up, the swelling of the face and neck had disappeared and she had had no complaints for one year at the time of writing.

Discussion

It is rare to have malignancy and localized tuberculosis in the maxillary sinus and draining lymph nodes simultaneously. However, the coexistence of two pathologies can be explained on the basis of immunodeficiency and minimal cellular immunity in malignancy (Katz, 1980), and this may increase the susceptibility of the cells to contract localized tuberculosis (Reed, 1976).

Acknowledgement

We are grateful to the Medical Superintendent and the Head of the ENT Department, Safdarjung Hospital, for allowing us to report this case.

References

AHMAD, K., CORBODA, R. B., and FAYOS, J. V. (1981) Squamous cell cercinoma of the maxillary sinus. *Archives of Otolaryngology,* **107:** 48–51.

HARRISON, D. F. N. (1973) The management of malignant tumours affecting the maxillary and ethmoidal sinuses. *Journal of Laryngology and Otology,* **87:** 749–772.

JAIN, M. R., CHUNDAWAT, J. S., and BATRA, V. (1979) Tuberculosis of the maxillary antrum and of the orbit. *Indian Journal of Ophthalmology,* **27:** 18–20.

KATZ, A. E. (1980) Advances in the immunology of head and neck cancer. *Otolaryngologic Clinics of North America,* **13:** 431–436.

KUKREJA, H. K., SACHA, B. S., and JOSHI, K. C. (1977) Tuberculosis of the maxillary sinus. *Indian Journal of Otolaryngology,* **29:** 27–28.

PAGE, J. R., and JASH, D. K. (1974) Tuberculosis of the nose and the paranasal sinuses. *Journal of Laryngology and Otology,* **88:** 579–583.

REED, W. P. (1976) The immunologic substrate—role of local and systemic immunity in the head and neck. *Otolaryngologic Clinics of North America,* **9:** 581–596.

Address for correspondence:
Dr. Ved Vrat,
DII/42 East Kidwai Nagar,
New Delhi, India.

https://doi.org/10.1017/S0022215100096924 Published online by Cambridge University Press