Dermoid of the Nasopharynx

Ishwar Singh
Geeta Gathwala
Sanjay Saxena
U.Wig
T.S. Jaswal

Dermoids or hairy polyps represent the most primitive form of teratomas. They are benign lesions with very limited growth potential and occur only rarely in the head and neck region(l). Most arise in the nasopharynx or oropharynx and usually present at or shortly after birth with signs of obstruction. We report a case of nasopharyngeal dermoid that first presented at the age of 2 years.

Case Report

A 2-year-old female child was admitted with difficulty in swallowing both solids and liquids of 15 days duration. There was no immediate past history of upper respiratory tract infection or nasal discharge. On examination, the child was thinly built with no respiratory distress. Examination under general anesthesia revealed a smooth mass arising from the lateral wall of the nasopharynx on the right side and extending into the oropharynx. Rest of the ENT examination was normal. X-ray base of skull showed a soft tissue mass (*Fig. 1).* This was excised under general anesthesia by cutting the pedicle with a snare. There was minimal bleeding and the postoperative period was uneventful. Pathological examination revealed 1.7 x 1.0 x 0.5 cm greyish white polypoid mass of heterogenous consistency. The cut surface was also greyish white. Microscopic examination showed a central mass of adipose tissue with fibrovascular septae. The covering epithelium was of skin, containing well developed hair follicles and sebaceous glands.

Discussion

There are two theories to explain the origin of dermoids, namely, the inclusion theory and the totipotent cell theory. Accord-

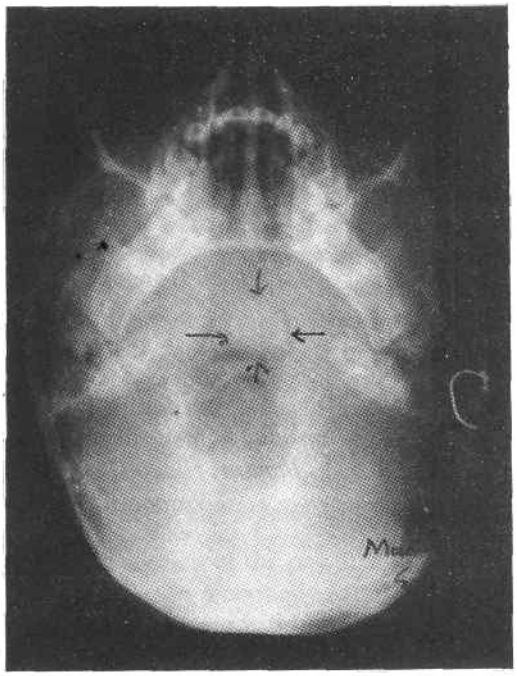

Fig. 1. X-ray base of skull showing a soft tissue mass in nasopharynx.

From the Departments of ENT, Pediatrics and Pathology, Medical College and Hospital, Rohtak 124 001.

Reprint requests: Dr. Ishwar Singh, 1552/18D, Chandigarh.

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ing to the inclusion theory, there is inclusion of germ layer into deeper tissues at point where fusion lines fail to close completely. The totipotent cell theory believes that teratomas arise from totipotent cells derived from two or all three of the germ layers which escape the normal regulators that govern the orderly growth and development of an embryo(2).

Teratomas occur in one in 4000 births(2). In the head and neck region these account for only 2-5%. Hairy polyps are more common in females compared to males in a ratio of 6:1(2). Although reported at all ages, the maximum reported incience is at birth(l,3). Dermoids of the nasopharynx may arise from the lateral wall as in the present case or from the superior surface of the soft palate or from the oropharynx(l,3). They are generally pedunculated but may be broadbased(l). The common symptoms described are obstructive dyspnea or frank suffocation and difficulty in sucking, feeding and swallowing(l). Partial obstruction due to a long pedicle may reportedly give rise to noisy and prolonged feeding, snoring, snuffing and nasal discharge. None of these were observed in our case. Nasopharyngeal teratomas are reported to be associated with an increased incidence of palatal defects, hemicrania and anencephaly(4). The recommended treatment is surgical excision, under general anesthesia in children. Endotracheal intubation in these cases may be difficult(5) and sometimes tracheostomy may be required(6). The reported surgical mortality is 9%; of those not treated all died. No recurrence or maligancy have been reported in infants(7). In young children the differential diagnosis should include choanal atresia, meningocele, encephalocele, glioma, craniopharyngiomas and Rathke'scyst(l,8).

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