Otoscleroma

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Scleroma, a chronic infective granuloma, is identified under the microscope by the presence of large foam-like cells (Mickulicz's cells). It is common in the upper respiratory tract but is virtually unknown in the ear. This leads us to report the present two cases.

Case 1

F.I., a male, aged 30 years, attended our E.N.T. Department with bilateral nasal obstruction and a history of repeated attacks of epistaxis of 7 years' duration, together with bilateral aural discharge and deafness in the left ear. Examination revealed a hard mass seen protruding from both anterior nares. The mass was ulcerated in some parts. The larynx and trachea were free, but the nasopharynx was scarred and difficult to examine. The right ear was wet and showed a large subtotal perforation. The left ear was filled by an aural polyp. The case was diagnosed clinically as rhinoscleroma and bilateral chronic suppurative otitis media with a left aural polyp. Biopsy from the nasal mass showed rhinoscleroma. An operation for radical mastoidectomy was decided upon to treat the left ear. During operation, we found that the middle ear, the attic, the mastoid antrum and mastoid cavity were full of vascular granulation tissue. The polyp together with some parts of the granulations in the mastoid process were sent for biopsy, and both proved to be of scleromatous nature.

Case 2

W.A., a female, aged 40 years, presented to our section complaining of left ear discharge and deafness of 4 years' duration. Examination revealed that the nose, nasopharynx, larynx, and right ear were free, the left ear showed an aural polyp and purulent discharge. We found it feasible to remove the polyp first for drainage of the middle ear. Under general anaesthesia the polyp was excised and marked bleeding occurred. This led us to do a biopsy for the polyp and the result was scleromatous disease. We opened the ear and found the mastoid process together with the middle ear and attic full of vascular granulation tissue, the biopsy of which produced scleroma.

Discussion

Review of the literature revealed that scleroma affects mainly the nose, the pharynx, the larynx and trachea. However, it has been reported in the sinuses (Yassin and Safwat, 1966); lacrymal apparatus (Badrawy, 1962) and

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https://doi.org/10.1017/S0022215100080737 Published online by Cambridge University Press

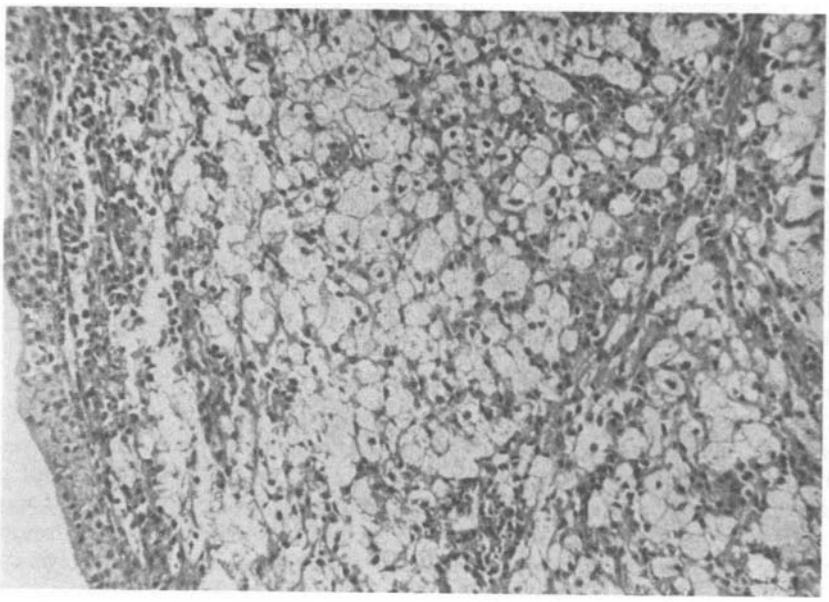


FIG. 1.

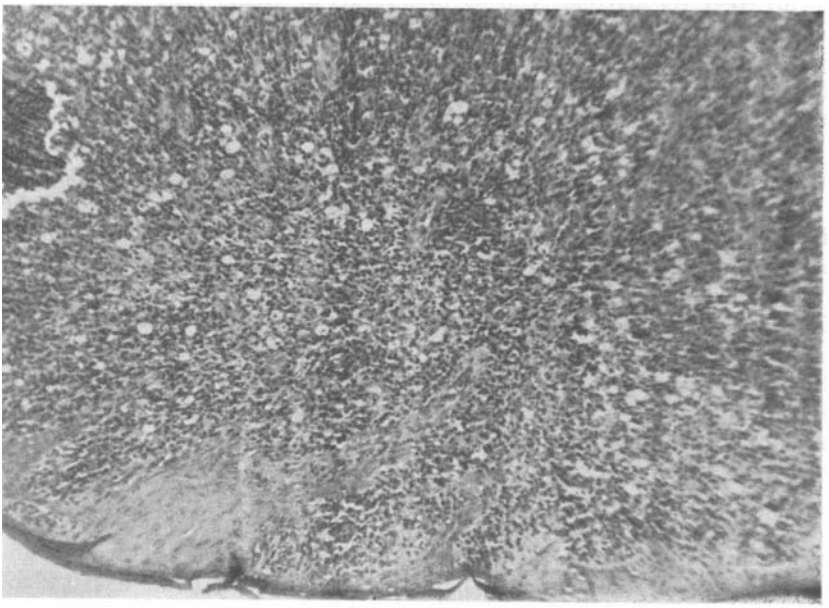


FIG. 2.

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the bony skeleton of the nose (Badrawy, 1966). An intracranial extension of scleroma was reported by Hara (1957) and by Bahri, Bassi and Rohatgi (1972). No cases have been reported in the ear, except for three cases published by Barbary, Fouad and Fatthi (1973).

During the years 1966–73, we came across 410 cases of scleroma of the upper respiratory tract, all examined clinically and almost one-quarter proven histologically. We found only these two cases with ear involvement. Scleroma of the ear, not previously described in the literature, we have called otoscleroma.

In our first case there was scleromatous affection of both nasal cavities, the nasopharynx and the left middle ear cavity. The ear affection here could be either a multicentric affection of submucosal spread along the Eustachian tube. However, our second case leads us to favour the first suggestion as it demonstrated that scleroma can occur in the middle ear cavity without affection of the nose or nasopharynx.

Barbary and Safwat (cited by Badrawy, 1962) suggested that scleroma arises at a junctional epithelial line, i.e. a line where two epithelia join. Thus, rhinoscleroma starts at the line where the stratified squamous epithelium of the vestibule joins the columnar respiratory epithelium of the nose proper, and laryngoscleroma starts below the vocal cord where the stratified squamous epithelium of the cord merges with the columnar ciliated epithelium in the subglottic area. In the middle ear the part of the tympanic cavity embryologically represented by the tubotympanic recess is lined by columnar ciliated epithelium. The rest of the middle ear cavity is lined by flattened and non-ciliated epithelium (Mawson, 1963). This line of junction of the two epithelia may explain the origin of otoscleroma on the same basis.

Summary

Otoscleroma is a new term used by us to describe the occurrence of scleroma in the middle ear. Although no cases have been reported before in the literature, we describe here two cases.

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https://doi.org/10.1017/S0022215100080737 Published online by Cambridge University Press

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