A GIANT TONSILLOLITH

By L. H. HIRANANDANI (Bombay)

LITHIASIS in the tonsil is by no means a new clinical condition. There is evidence in the literature to show that it was recognized as early as XVI Century (Terillon). Small concretions in the tonsil are not rare but a well formed giant tonsillolith is not very common. In recent years only a few cases have been reported.

Case Report

An elderly housewife of 65 years consulted me in the month of *November 1965* with the complaint of recurrent attacks of pain in throat of many years' duration.

She was treated by her family physician during every attack with temporary relief. She was diabetic and hypertensive. Both these conditions were controlled by appropriate drugs. She had no other significant illness in the past.

Examination

Inspection of the oral cavity revealed that the right tonsil was much larger than the left. The medial surface of the right tonsil showed a greyish yellow hard mass embedded in it. There was hardly any tonsillar tissue left. The left tonsil had enlarged crypts and thick, solid pus could be squeezed from it.

On palpation the right tonsil was slightly tender and a stony hard mass was felt in it. The diagnoses of tonsillolith was made.

Other E.N.T. Examination did not reveal anything abnormal.

She was operated on under local anaesthesia. The right tonsil was shelled out easily. Bleeding was minimal and no ligature was required on the right side while two bleeding points had to be tied on the left. Post-operative period was uneventful.

Macroscopic examination of the specimen of right tonsil showed an oval greyish yellow tonsillolith with nodular surface. It was stony hard and measured $2 \cdot 5$ cm. $\times 3$ cm. The cut surface showed a hard yellowish mass. The weight of the specimen was 42 gm. The hard mass was surrounded by atrophic tonsillar tissue.

The left tonsil which was apparently non-calcareous was examined histologically. A section of this tonsil showed, "A small Cavity, which appears to be a crypt, is lined by stratified squamous epithelium. The crypt is filled with keratin and large numbers of lymphocytes. Calcification was marked in the vicinity of the colonies of organisms which appeared like actinomycetes." Special stain, Gram's, confirmed this. In the affected right tonsil no fungal nidus could be detected, not even with the Gram's stain. The fungus has probably died after concentric deposition of salts had taken place.

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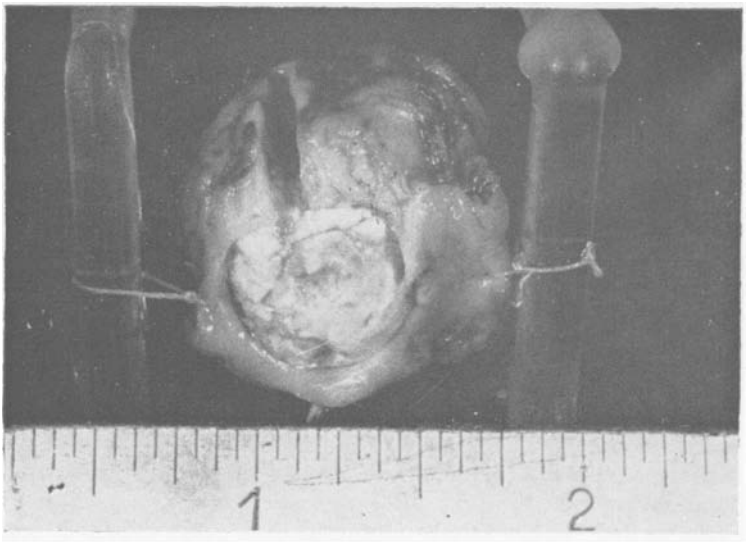


FIG. 1.
Showing the Tonsillolith.

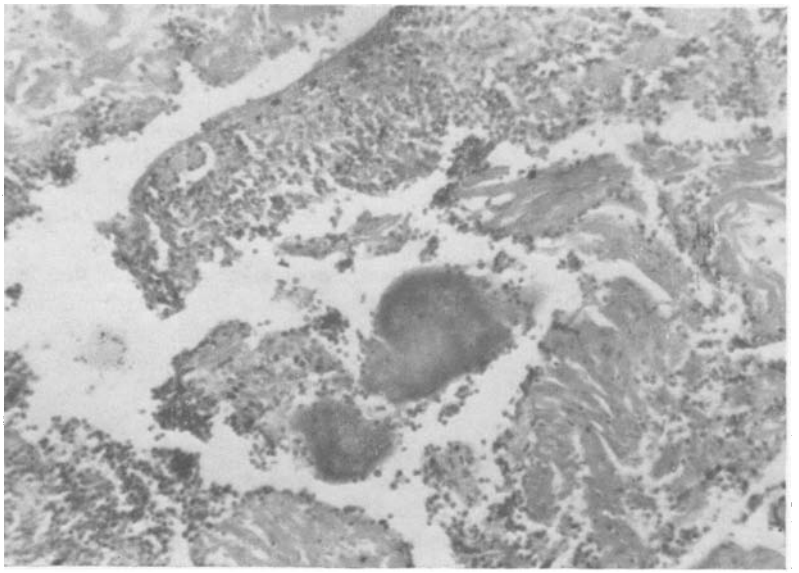


FIG. 2.
Microphotograph showing Fungus Nidus in the other apparently noncalcarious Tonsil.

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The material from the calculus was sent for chemical analyses and was reported to be composed of carbonates and phosphates of calcium which is usual but in addition to this it also contained the ammonia radical.

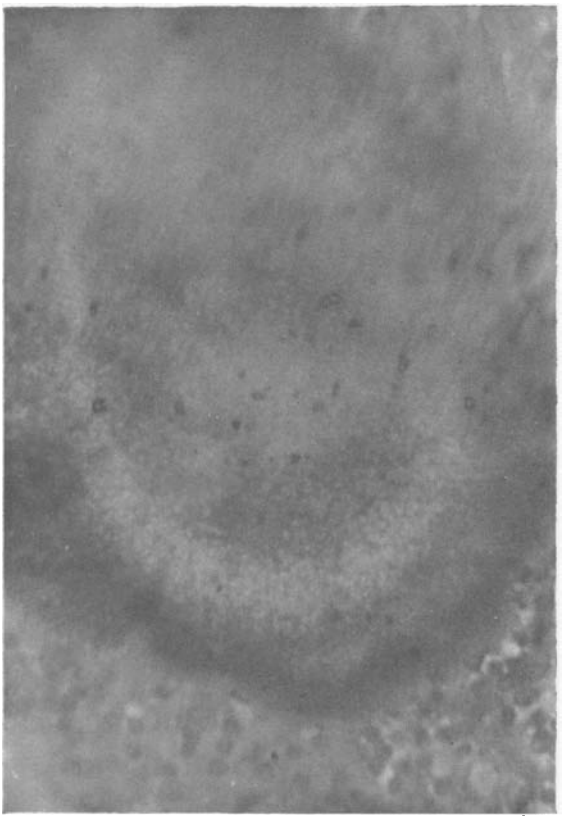


FIG. 3.
Typical Fungus showing Rayed-appearance.

Discussion

About the aetiology and origin of the condition many views have been expressed but no definite answer is available.

Eighty cases of lithiasis were found by Weller (Ballenger and Ballenger, 1957) in examining 1,000 tonsils. Of these forty-seven cases had actinomycosis-like colonies of mixed mouth organisms which are commonly found in the crypts of the tonsils. He insists that this is the most common mode of origin. According to him such colonies grow peripherally with a more or less clearly "rayed" or "clubbed" appearance. As these became large the central portion dies where salts of calcium are deposited. This process goes on till a large calculus is formed. In the remaining cases of his series, the calculi were found

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to be in the accumulated Keratohyaline masses in the crypts. He says that concentric deposition of salts around these masses gives rise to calculi.

P. R. R. Clarke (1954) reported a case where four calculi weighing 13·3 gm. together were removed from the tonsil of a male aged 35 years.

Joseph Harding from Kent (1962) reported another case where he came across two calculi in one tonsil, one measuring about 1 cm. in diameter. The patient was a female of 57 years.

Summary

A case is reported here, where a single giant tonsillolith was removed from a female of 65 years. The composition of the calculus was carbonate and phosphate of calcium but in addition to the usual radicals ammonia radical was also present.

The centre of the Calculus did not show any fungal nidus. It is supposed that the fungus had died during the deposition of salts. But the other tonsil showed minute nidi of fungal infection along with areas of calcification. In due course of time, probably, a tonsillolith would have developed in this tonsil also.

Acknowledgments

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