

Cholesterol granuloma of the maxillary sinus encountered during floor augmentation procedure: A case report.

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Abstract

BACKGROUND: Cholesterol granuloma (CG) is a foreign-body reaction to the deposition of cholesterol crystals. Its occurrence in the paranasal sinuses is very rare.

PURPOSE: This report describes a new case of maxillary sinus CG discovered incidentally during sinus-floor augmentation for dental implant placement in a 60-year-old female patient.

MATERIALS AND METHODS: The preoperative clinical and radiological examinations revealed a normal maxillary antrum with no evidence of sinus pathology. After lateral osteotomy, a dark-green, viscous soft tissue mass appeared through the thin mucous membrane inside the sinus. Enucleation and curettage of the sinus contents including the sinus membrane were performed for histopathologic analysis. The augmentation and implant placement procedures were postponed.

RESULTS: Histopathologic analysis showed several fragments of granulation tissue containing diffuse cholesterol clefts surrounded by mixed chronic inflammatory cell infiltrate including plasma cells and lymphocytes. These features were compatible with the diagnosis of CG. The patient was followed up for 3 months after the first procedure, and a second attempt of sinus augmentation and dental implant insertion was then carried out. The inserted dental implants were followed up for 6 months without any complications.

CONCLUSIONS: CG of maxillary sinus can be an incidental finding. For this reason, the final diagnosis can only be achieved after examination of the material under the microscope.