Recurrent osteoma overlying cranioplasty

Case report

DIMITRIOS A. VONOFAKOS, M.D., AND EUSTATIOS KARAKOULAKIS, M.D.
Departments of Neuroradiology and Neurosurgery, University of Frankfurt, Frankfurt, West Germany

An osteoma of the skull was removed from this patient and the bone defect was covered with a cranioplastic plate. Two years later, a recurrent osteoma developed, overlying the plastic plate. There was no connection with the borders of the craniectomy.

KEY WORDS · skull osteoma · cranioplasty · periosteum

OSTEMAS belong to the general class of fibro-osseous tumors. They are classified into four categories according to their histological type, or into five groups according to their size and histological maturity. We are reporting a patient with a type of osteoma that grows from the outer cranial table.

Case Report

This 22-year-old man came to the clinic because of a swelling on the right side of his forehead. X-ray films of the skull showed a bony tumor that arose from the outer cranial table. The probable diagnosis was osteoma (Fig. 1). At operation, the tumor was removed, along with an area of surrounding bone. The bone defect was covered with a molded cranioplastic plate (Paladur). The histological examination revealed an osteoma.

Two years after the operation, the patient returned with a new swelling lying directly over the original site, where we had covered the bone defect with plastic. X-ray films of the skull showed a bone tumor lying over the center of the plate. There was no connection to the borders of the craniectomy defect (Fig. 2). Reoperation revealed new bony material, which seemed to be an osteoma. The histological picture was typical of an osteoma (Fig. 3).

Comment

The development of a recurrent osteoma overlying a plastic plate is rare. The only possible explanation that we could postulate is as follows: At the first operation, the tumor was removed along with surrounding bone. However, during the separation of the galea and periosteum from the tumor, very small bits of tumor tissue were probably left behind, connected to the periosteum or galea, and the tumor recurred at this site.

* Paladur cranioplastic plate manufactured by Kulzer & Co. GmbH, 638 Bad Homburg, West Germany.

FIG. 1. Preoperative skull film, tangential projection. The prominent exostosis is protruding from the outer table and is surrounded by normal-textured bone (arrow).
FIG. 2. Skull films, anteroposterior (left) and tangential (right) projections, showing the recurrent osteoma. The operative skull defect and the recurrent osteoma can be seen. The tumor shows no connection to the craniectomy borders (arrows).

FIG. 3. Left: Macroscopic picture of the surface of the recurrent osteoma. Periosteal rests are seen at the lower pole of the tumor (arrows). There is no connection to the craniectomy borders. Right: Photomicrogram of the recurrent osteoma showing the lamellar bone structure. The haversian canals contain fat and blood vessels. H & E, × 150.
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This unusual case leads us to conclude that, during operative removal of a skull osteoma, the galea should be carefully separated from the tumor and the periosteum excised to avoid a possible recurrence.

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References


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Address reprint requests to: Dimitrios A. Vonofakos, M.D., Abteilung für Neuroradiologie, Klinikum der Universität, Schleusenweg 2-16, 6000 Frankfurt/M 71, West Germany.