A POSSIBLE CASE OF AN OSSIFYING FIBROMA IN A LATE NEOLITHIC POPULATION FROM PORTUGAL

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ARCHAEOLOGICAL CONTEXT
Location: Lapa do Bugio, Sesimbra (40km south of Lisbon), Portugal
Excavations: carried out between the late 1950’s and the 1960’s
Human remains: 10 primary burials and an associated ossuary
Radiocarbon dating of coal sample: 4850±45 BP, calibrated 2 sigma: 3710–3620 BC (Grn-5628)

DESCRIPTION OF THE CONDITION

Round tumour mass
Location: molar-bearing area of the right maxilla
The tumour had completely invaded the right maxillary sinus
Dimension: approximately 24 × 24 mm
The outer surface of the right maxillary bone showed a depression located at the same level of the tumour with associated porosity. Analogous but smaller depression was also visible in the same region of the left maxillary bone

In contrast to the outer surface of the tumour, which was relatively smooth, the inner surface was much rougher and irregular, presenting several osseous outgrowths
The lesion was surrounded by furrows, most probably left by blood vessels or nerves which were diverted by the pathological outgrowth

Despite its hard and osseous consistency, the tumour presented an opening on its mesial surface
Besides, it had communication with the empty socket of the first right maxillary molar

RADIOLOGICAL FEATURES
Well-demarcated radiolucent lesion with internal radiopaque calcified patches

DIFFERENTIAL DIAGNOSIS

Ossifying fibroma is a benign neoplasm of the bone-forming tissues. Its demarcated nature is an important feature distinguishing it from fibrous dysplasia. Radiographically, the appearances vary with the stage of development of the lesion. In late stages, radiopaque patches coalesce to form a densely radiopaque mass with or without a radiolucent periphery

Fibrous dysplasia is a slow progressive disorder where normal bone is replaced by fibrous tissue and immature woven bone. The radiology of the fibrous dysplasia is poorer defined and radiopaque. Alteration of the lamina dura to the abnormal bone pattern, and narrowing of the periodontal ligament space are distinguishing features. This may account for the fusiform expansion of fibrous dysplasia of the affected bone

Focal cemento-osseous dysplasia is smaller, rarely exceeding 2 cm in diameter, and may often be associated with a previous tooth extraction site. Besides, it usually blends with the adjacent bone, whereas ossifying fibromas tend to shell out

CONCLUSIONS
The macroscopic and radiological features of the tumour lead us to diagnose it as a probable ossifying fibroma. The presence of an analogous but smaller depression in the same region of the left maxillary bone may correspond to the beginning of a similar lesion.
After one asymptomatic initial period, this individual may have presented facial signs associated with the expansion of the tumour which occupied the right maxillary sinus. If left undisturbed, this tumour would have led to various ophthalmologic, respiratory and dental problems as well as malocclusion.
This appears to be the earliest reported case of this condition in the osteoarchaeological literature, and adds to the very few palaeopathological case descriptions available for ossifying fibroma

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