EDITORIAL

CLINICAL RECOGNITION OF ODONTOGENIC TUMOURS

Tissues that contribute to the formation of teeth under stages of differentiation concomitant with the period over which the entire dentition is developing and in a mature form may persist in the jaws not only while the individual retains any teeth but also after they become edentulous. Any of the tissues participating in this process may be involved in the development of malformations (harmartomas) or neoplasms collectively referred to as odontogenic tumours (OTS) and these can be generated at any stage of an individual's life(1). The tumours and tumour-like growths arising from the odontogenic tissues constitute a heterogenous group of particularly interesting lesions, because they display the various inductive interactions that normally occur among the embryonic components of the developing tooth germ(2). These lesions may originate from the epithelial and/or the ectomesenchymal odontogenic tissue exhibiting varying degrees of intertissue interaction(3). Nevertheless, unique odontogenic lesions with combined histologic features that apparently defy the World Health Organisation (WHO) classification have been encountered occasionally. Moreover, some curious tumours classified into the group of epithelial tumours without odontogenic ectomesenchyme have shown evidence of dentinoid induction(4).

The natural history of OTS varies considerably. Some tumours have a limited growth potential and probably represent hamartomas whereas others possess all the attributes of true neoplasms(5). In addition to the differences shown radiographically and histologically, these lesions have clinical characteristics of location and distribution by age and sex of patients that may aid in distinguishing them from non-odontogenic lesions and from each other. Only a limited number of publications cover a large series of OTS and there is still a lack of agreement on the type of the most frequently encountered OT worldwide(6). Undoubtedly, knowledge of the biology, prevalence, distribution and demography of OTS may well contribute important information to oncology in general. There seems to be a need, therefore, for carefully planned epidemiologic studies of OTS in different communities(7).

So far, epidemiologists in the African region still appear to have paid scant attention to the incidence of OTS and allied lesions yet the grave morbidity arising from these often locally destructive diseases can be quite distressing. In resource-poor economies there is the prevailing tendency of late presentation of diseases in addition to the delayed definitive diagnosis and effective management. Many times a benign disease process will persist throughout the patient's lifespan. Indeed, because of their slow growing nature, tumours in an economically deprived setting may remain untreated for years and, thus, the number of patients with these tumours increases in the general population(8).

The well documented and classified lesions of odontogenic origin include the ameloblastoma, cementifying/ossifying fibroma, odontogenic myxoma (fibromyxoma), calcifying epithelial odontogenic tumour (CEOT), adnomoatoid odontogenic tumour (AOT), calcifying odontogenic cyst (COC), cementoblastoma, odontoma, ameloblastic fibroma and amelobalstic fibro-odontoma. There are now other tumours that have been recognised as hybrid odontogenic tumours. Recognition of this group of tumours is probably of academic and research interest only for oral pathologists(4). As a group, OTS have been considered as uncommon lesions because they represented only 1.3% of all the biopsy specimens in one western study(5). There is, however, a paucity of information on geographic or racial variation in the incidence and distribution of these tumours(3). Knowledge of the relative frequencies of OTS in different ethnographic, socioeconomic and institutional backgrounds is an essential step in assessing the relative importance of the lesions to the overall well-being of the population in looking for their possible causes and effective management modalities.

Of all the OTS, ameloblastoma may be the most commonly occurring lesion as indicated in diverse studies worldwide. Probably this neoplasm may be more common in black Africans than in whites. The tumour affects the mandible predominantly with an equal male to female affliction in a relatively young age group(9). In one African study, amelobalstoma constituted nearly 98% of all the OTS in that unit(10). When this tumour occurs in early childhood, its treatment poses a special problem in terms of how much tissue may be surgically excised(11). Although insufficient numbers of malignant variants of OTS have been recorded, there are adequate satisfactory credentials to justify the recognition of the malignant ameloblastoma; odontogenic sarcomas and carcinomas including the amelobastic fibrosarcoma, ameloblastic odontosarcoma and ameloblastic carcinoma respectively. While these neoplasms may be rare, when they occur they pose the greatest challenges with regard to effective management. As a matter of fact any tumour afflicting the mouth and jaws can be one of the most "traumatic" experiences because this form of neoplasm affects the most fundamental aspects of life including breathing, eating, speech, hearing and appearance. Patients may undergo long, physically demanding multimodal treatments (surgery, radiotherapy and chemotherapy), which often result in debilitating changes - physical, psychological, functional and body image(12). Thus, the comprehensive documentation of the pattern of occurrence of OTS in any specific population as has been accomplished

by Simon *et al*(13) in this issue of the journal is highly commendable because this provides crucial information with regard to the planning of relevant surgical services especially when it is universally apparent that most of these neoplasms afflict patients aged below 30 years.

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