

Odontogenic tumor: Indian scenario



Odontogenic tumors are lesions arising from or associated with odontogenic apparatus, their remnants or their derivatives. They are considered to be rare lesions, and as per the reported studies, they consist of 3%–9% of all biopsied specimens.^[1-13] The classification of odontogenic tumors is dynamic. It is modified regularly, as our understanding and perception of the nature and behavior of these lesions change as a result of newer diagnostic methods and molecular studies.

Classification of odontogenic tumors started with Pierre Paul Broca in 1989^[14] and since then it has undergone modification by several authors. The last one was made by the World Health Organization (WHO) in 2005,^[15] which carried a lot of controversy regarding the renaming of Odontogenic Keratocyst as Keratocystic Odontogenic Tumour and inclusion of it in the tumor category.^[16] There are also other shortcomings in the WHO classification (2005), which include the following; inclusion of bone-related tumors and other tumors in the odontogenic tumors classification, which was previously known as “Classification of Odontogenic tumors and allied lesions.” Although there is the existence of peripheral variant of other lesions such as a calcifying epithelial odontogenic tumor, squamous odontogenic tumor, adenomatoid odontogenic tumor and odontogenic fibroma peripheral ameloblastoma alone is given a place in this classification. Further, in the malignant category, the justification for the separation of primary intraosseous squamous cell carcinoma derived from keratocystic odontogenic tumor from primary intraosseous squamous cell carcinoma derived from other odontogenic cyst is unclear and may not be necessary. Furthermore, no mention was made with reference to the hybrid odontogenic tumors and other rare entities such as primordial odontogenic tumor, sclerosing odontogenic carcinoma, adenomatoid dentinoma and the like.

Although there are many larger epidemiological studies reported from other parts of the world on odontogenic

tumors, the studies and reports from India are scarce. There are only 9 published reports available till date.^[6-13] These published reports are among 7 out of 29 Indian states and 7 union territories, which roughly covers only one-third of India. Epidemiological studies are important because they help to know more precisely the frequency and/or patterns of disease occurrence at the individual or societal levels through knowledge of the basic epidemiological features such as age, gender and site of occurrence, which may help in identifying the groups at risk and the possible factors associated with it. Further, they are essential for assessing the disease burden, health-care planning and evaluating the effectiveness of the choice of preventive measures for reducing disease burden.^[17] Regarding the epidemiological studies on odontogenic tumors in India, All the reported studies from India are from postgraduate dental teaching institutions. There are 308 dental colleges in India out of which 241 colleges offer postgraduate courses in dentistry. It is worrisome to note that there is only <10 institution published studies on the occurrence of odontogenic tumors till date. In a stricter sense, these studies are institution-based studies and not population based. The reason could be a lack of epidemiological data, nonreporting and the attitude toward publication.

Apart from dental teaching institutions, there are around one lakh hospitals/nursing homes funded and run by the union government, state governments and private sectors and numerous primary health centers and clinics spread over the rural, urban and metropolitan cities in India. People with health ailment, approach appropriate hospitals depending on their financial status and accessibility. There is no proper referral system adopted and followed in India. Thus, the patient reported in these hospitals with odontogenic tumors may not be included in any of the studies on the occurrence of odontogenic tumors in India.

After the Dental Council of India’s direction on the publication of scientific articles, there was the appearance

of many new journals and articles, which also included odontogenic tumors as isolated case reports, but most of them do not form a part of any hospital-/institution-based study.

The National Cancer Registry Program was started by the Indian Council of Medical Research with a network of cancer registries across the country in the year 1981, with the purpose of finding out the pattern of occurrence of cancer, designing, planning, monitoring and evaluation of cancer control activities and to develop training program in cancer registration and epidemiology.^[18] In the same way, a National Registry for Odontogenic tumors may be formed in India, which may serve to identify the frequency of occurrence, pattern of presentation and assessing the treatment modalities. I suggest Indian Association of Oral and Maxillofacial Pathologists to take initiative in this regard to form a National Registry for Odontogenic tumors and other relevant lesions.

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