Evolution of classification systems of odontogenic tumors - An enigma

Odontogenic tumors are the diverse group comprising benign and malignant neoplasms to hamartomatous lesions. There has been a constant change in the classification systems ever since Broca's classified in the year 1867. Later, the WHO classified these odontogenic tumors in the year 1971. In these classification systems, there were omissions and updating of lesions by the WHO. This dynamic change in the classification systems is based on the results and conclusions of molecular and genetic studies carried out at various research institutes across the globe. In this context, the WHO has recently reclassified the odontogenic tumors in 2017. In this classification, Keratocystic odontogenic tumor and calcifying cystic odontogenic tumor have been omitted from odontogenic tumors, and they are reclassified as odontogenic cysts. Another major change in the classification of odontogenic tumors is a reclassification of desmoplastic ameloblastoma as a histologic subtype of conventional/solid ameloblastoma, rather than a distinct entity or a type of ameloblastoma. Newer entities have been added to the classification systems, namely Primordial odontogenic tumor and sclerosing odontogenic carcinoma. The WHO 2017 classification has simplified odontogenic sarcomas entitling them as only odontogenic sarcomas rather than subtyping them. Understanding the pathogenesis and the histopathological characteristics of the newer entities will enable the prompt diagnosis and treatment plan of the lesions.

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