

Clinicopathological Presentations of Intra Oral Angiosarcoma and Haemangioendothelioma

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Angiosarcoma and Haemangioendothelioma are malignant and intermediate malignant vascular tumours derived from endothelial cells, constituting less than 1% of all soft tissue sarcomas occurring in the oral cavity. This study aimed to highlight the clinicopathological presentations of primary and metastatic intraoral angiosarcoma (InO-AS) and haemangioendothelioma (InO-HE). We analysed 57 primary and 14 metastatic InO-ASs and 42 InO-HEs from published literature, in addition to three InO-ASs and two InO-HEs from the archives of the department. The results reveal that InO-HE had a notable 34.09% occurrence in children with a mean age of 31.5 years, while primary InO-AS occurred in 11.67% of children with a mean age of 52.33 years, and metastatic InO-AS had a higher mean age of 63.86 years. There was a male predilection with notable differences in the male-to-female ratio between primary and metastatic InO-ASs, with ratios of 1.3:1 and 3.67:1, respectively. InO-HE showed a male-to-female ratio of 1.2:1. Tongue involvement was prominent in primary InO-ASs (35.00%) and InO-HEs (36.36%), whereas metastatic InO-ASs were confined to the maxillary and mandibular gingiva. Approximately 53% of the primary InO-ASs were smaller than 5 cm, and all metastatic angiosarcomas were smaller than 5 cm. The majority (64.7%) of primary InO-ASs were of high grade, whereas all metastatic InO-ASs were of high grade. Approximately 86.36% of reported InO-HE cases were epithelioid HE. Furthermore, treatment outcomes varied, with 35.00% of primary InO-AS patients surviving with no evidence of recurrence over a 36-month mean follow-up period compared to 14.28% in metastatic cases, where 71.43% ended in death due to disease over a 16.5-month mean follow-up period. In contrast, 65.91% of InO-HE patients presented no evidence of recurrence over a mean follow-up period of 45 months, and no deaths were reported. These findings emphasize the distinct clinicopathological features and outcomes of these malignancies, consolidating the literature on intraoral angiosarcomas and haemangioendotheliomas, and offering insights to enhance diagnostic and management strategies.

Keywords: Angiosarcoma, Haemangioendothelioma, Outcome, Oral Cavity