Can there be a correlation established between characteristic histological and radiographical findings in adenomatoid odontogenic tumor? A case report

Adenomatoid odontogenic tumor (AOT) is an uncommon, benign epithelial lesion of odontogenic origin which mostly affects the young individuals. As per literature the mean age of presentation is 13.2 years, female to male ratio is 2.3:1 and is most commonly found in maxilla (maxilla to mandible ratio is 2.6:1). It is usually associated with an impacted tooth which may be grossly displaced. Recommended treatment can vary from enucleation to resection of the tumor. In our case, we have attempted to establish the characteristic correlation between histological and radiological parameters. In this case report a 13 year old female was presented with painless swelling (4×4 cm) on left side of her face. Intraoral examination shows unerupted canine, premolars and molars of the ipsilateral side. Histopathological report suggested it to be an adenomatoid odontogenic tumor. Immunohistochemical stains including Ki-67, p53, BCL2 was done to see the proliferation and aggressiveness of the tumor. Orthopantomogram was done initially to see the status of unerupted teeth; CT scan was advised to see the extent of lesion and displacement of teeth. The aggressiveness of bone destruction on radiograph and CT scan were misleading initially towards dentigerous cyst but the characteristic infiltrating bony destruction was suggestive of more aggressive pathology. Histological parameters obtained using immunohistochemistry facilitated the diagnosis of adenomatoid odontogenic tumor. Enucleation and curettage was done along with removal of impacted and displaced teeth.

Biography

Muhammad Mumtaz has completed his Bachelor of Dentistry in 1998, Masters in Dental Surgery in 2008 and also completed his PhD. He has worked as an Associate Professor in University College of Dentistry, University of Lahore, Pakistan for seven years. Currently, he is working in Maxillofacial Department of King Salman Hospital, Riyadh, Kingdom of Saudi Arabia. He has published more than 20 papers in reputed journals.

mumtazmaxfac@gmail.com