Adult High-Grade Head and Neck Cutaneous Rhabdomyosarcoma Misdiagnosed as Low-Grade Atypical Fibroxanthoma on Initial Pathology: A Case Report and Review of Diagnostic Considerations

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Abstract

Background: Adult head and neck rhabdomyosarcoma (AHNRMS) is an exceedingly rare soft-tissue sarcoma. We describe a case of AHNRMS that was initially misdiagnosed as atypical fibroxanthoma (AFX). Methods: A 61-year-old male with a history of cutaneous squamous cell carcinoma (cSCC) of left face status post definitive radiation presented with a history of rapidly enlarging masses on the left face and nose. Patient had three large, exophytic masses on the left midface with limited local invasion. Initial pathologic evaluation revealed atypical fibroxanthoma (AFX). Results: Final histopathological and immuno-histochemical evaluation after surgical resection of the specimen revealed high-grade cutaneous rhabdomyosarcoma. Patient underwent adjuvant chemoradiation therapy. Conclusions: Soft-tissue sarcomas have considerable overlap in histopathologic presentation, and our case highlights the importance of a thorough immunohistochemical evaluation. This case contributes to the current limited body of literature on cutaneous AHNRMS as well as radiation-associated sarcomas of the head and neck (RASHN).

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