Atypical Fibroxanthoma in a 29-Year-Old Woman: A Case Study

ABSTRACT:
Atypical fibroxanthoma is often considered a skin cancer of the elderly. Typically it appears on the head and neck of older individuals with prolonged sun exposure. Ionising radiation is also considered another risk factor. There is a rare body presentation of these lesions on underexposed skin of the younger individual. The presentation can be mistaken for a benign lesion. This case presentation is that of a 29-year-old pregnant woman, who presented to clinic for obstetrical care. A rare atypical fibroxanthoma was discovered during the routine exam.

INTRODUCTION
Atypical fibroxanthoma typically appears on the head and neck of older individuals who have had prolonged sun exposure [1]. The following is a case report of a 29-year-old pregnant woman, who presented to clinic for obstetrical care. A physical exam revealed a right upper scapular lesion that had been present for greater than 10 years. Three other health care practitioners, advised and reassured her that, the lesion identified appeared to be benign. The initial biopsy report suggested it was a malignant spindle cell neoplasm. After immunochemical staining the diagnosis was consistent with that of an atypical fibroxanthoma.

CASE PRESENTATION
A 29 year old Caucasian, 12 week, pregnant female presented to clinic for Obstetrical care. A physical exam revealed a right upper scapular lesion that had been present for greater than 10 years. The patient history was significant for a smoking history and a 3-year exposure as a teen to tanning bed use. There is no family history of any type of Skin Cancers. She decided to wait until after the birth of the baby to have it removed. At her 6 week postpartum follow up visit she was encouraged to reschedule her appointment with the dermatologist. She admitted being quite distracted with adjusting to life with a toddler and a newborn and missed her appointment.

The lesion was similar in appearance to what initially looked like an actinic horn or an atypical keloid scar. She denied any known injury and she did not believe the lesion had changed in the last 10 years.

At the dermatology clinic a 1.8 × 1.0 × 0.5 cm biopsy was submitted for pathology. Microscopic findings were as the following: Extending from just below the dermoepidermal junction a dermal and subcutaneous neoplasm consisting of...
cellular interweaving fascicles or pleomorphic, atypical, ovoid and spindle-shaped cells with large vesicular nuclei, prominent nucleoli and moderate amounts of pale amphophilic cytoplasm. The neoplastic cells were multinucleated. The neoplasm extends to the deep surgical margin.

The initial diagnosis was a malignant spindle cell neoplasm with a lengthy note of differential diagnosis. Immunohistochemical stains are necessary when distinguishing AFX from other cancerous lesions [3]. The supplemental report provided a diagnosis consistent with that of an atypical fibroxanthoma.

The lesional cells stained positive for: vimentin and factor 13a; only a few lesional cells stained for CD10, DC31, CD68, DMA, S100 and SMA.

The lesional cells stained negative for: CD34, CD117, AE1/AE3, p63, desmin, HMB45, Melan-A, MITF, and SOX10.

The patient was referred to a plastic surgeon and went on to have a general anaesthetic for a wide local excision. This is considered the gold standard for treatment [2]. Surgical removal of the tumour in its entirety with this method has a favourable outcome with a rare risk of metastasis [3]. The final pathology report was negative for neoplasm. Radiation was not indicated, as the margins were clear.

**DISCUSSION**

Examination revealed an otherwise fit-looking young pregnant woman with an atypical lesion that did not fit with stated age. Initially thought to be an atypical keloid it was actually a rare atypical fibroxanthoma. According to Kolb & Schmeider 90% of atypical fibroxanthoma are asymptomatic lesions found on the head and neck of the elderly, presenting as plaque that may or may not be crusted or ulcerated. The Authors go on to say that the risk of metastases is rare and risk of recurrence is 0.0% to 6.9% [2]. With complete wide local excision the prognosis is good [3]. The list of differentials was quite alarming. The diagnosis is difficult and rarely made by clinical exam and a shave biopsy is usually done [3]. A large tissue sample is preferred for better visualization of the tumour [3]. The Authors preferential treatment is Mohs surgery for lesions located on the head, neck or other locations where tissue is not as abundant, given, it is a tissue sparing technique [3]. With no current guidelines both, Mohs surgery or a wide local excision with 2 cm margins are the acceptable treatment options [3]. Follow up suggested is a full skin exam and palpation of regional lymph nodes performed every 6 months [3].

She did have a consult as per her request with the local oncologist who deemed radiation unnecessary after undergoing the wide excision for complete removal of the lesion with clear margins. Genetic factors, ultra violet light, trauma, radiation therapy and immunosuppression are considered risk factors in the development of Atypical Fibroxanthoma [2].

**Take Home Points**

Atypical fibroxanthoma tend to be seen most often on skin exposed to ultraviolet light [3]. This case study supports the efforts needed to educate patients on Sun Protection from UVA/UVB rays and the avoidance of tanning beds.

Given the ease of this conversation it should be part of the summer, and vacationing repertoire.

**Conflict of Interests**

The author declares no conflict of interest.

**REFERENCES**

