

An Unusual Case of Superficial Angiomyxoma Presenting As Skin Tag on the Surface of Breast

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Abstract

Superficial angiomyxoma is a locally recurrent benign lesion commonly occurring in groin, genitals and lower abdomen of females. It is also seen in scrotum. These lesions are uncommon and can have overlapping features which often simulate as a skin tag with varying histological features of both benign and various other malignant lesions of soft tissue. Herewith a case of 37 year old lady with histologically confirmed superficial angiomyxoma that presented as skin tag in breast is being documented. Conclusion: Superficial angiomyxoma can present as skin tag; it is important to differentiate the lesion as latter may be associated with cardiac myxomas(Carney Complex).

Keywords: Skin tag breast, Angiomyxoma superficial type, Acrochordon.

Introduction

Cutaneous myxoma otherwise called as superficial cutaneous angiomyxomas are benign proliferation of highly vascular myxoid tissue was first described by Carney et al. [1, 2] that can appear as a solitary lesion; multiple lesions can be associated with Carney

Complex. Cutaneous myxoma are differentiated from various other lesions, because of the recurrence.

Case Report

A 37 year old lady presented with skin covered pedunculated swelling on left breast for past 6 months. She did not experience any infirmity except for the cosmetic reason. Clinical diagnosis of skin tag was made and lesion was excised in toto.

Macroscopic findings

A globular skin covered soft tissue of size measuring 2x1.8x.8cms.External surface had corrugated appearance. Cut surface showed homogenous grey white areas and appears gelatinous.



Figure 1: Skin covered polypoidal mass. Surface shows corrugated appearance

Microscopic findings

A polypoidal mass lined by stratified squamous epithelium with underlying stroma which is composed of edematous fibrocollagenous tissue with multiple dilated vascular channels surrounded by a mixed inflammatory cell infiltrate. The infiltrate is composed of neutrophils along with few lymphocytes and plasma cells. Scattered mast cells are also seen [Fig. 2, 3, 4& 5].

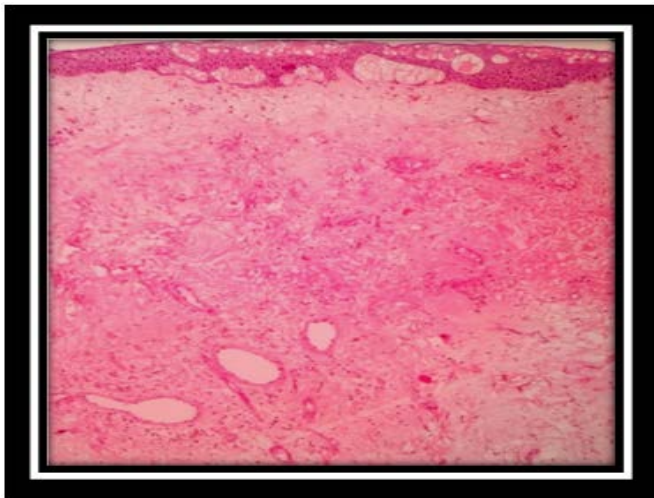


Figure 2: H&E-4X: Skin covered soft tissue contains blood vessels of different dimensions set against an edematous myxoid stroma.

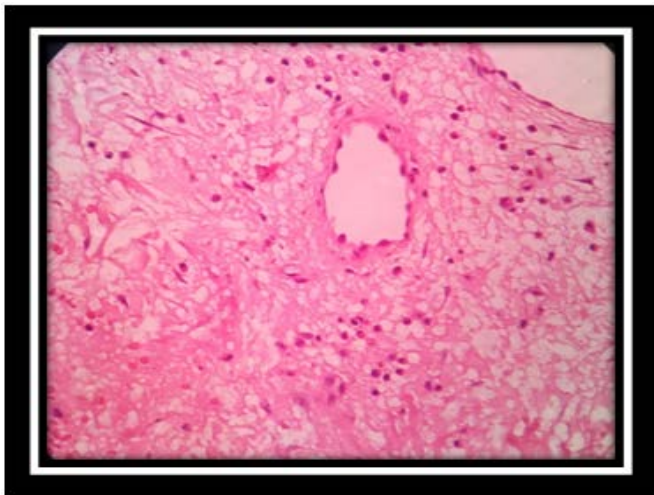


Figure 3: H&E 10X: Vessels having thickened wall surrounded by inflammatory cells made up of neutrophils, eosinophils, lymphocytes and mast cells. Stroma is myxoid in nature.

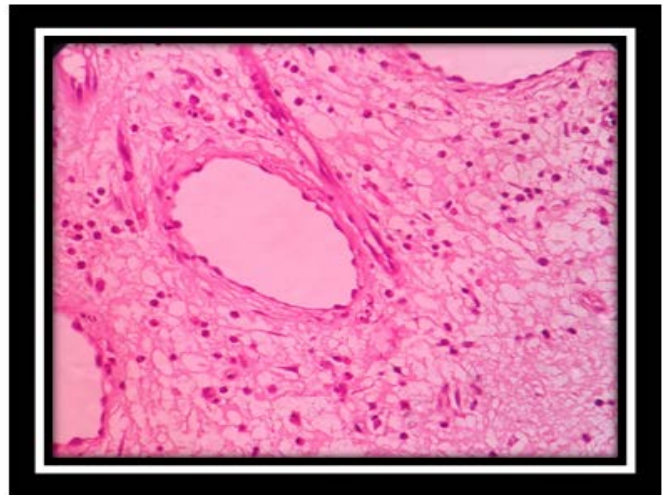


Figure 4: H&E-40X: blood vessels with thickened wall strands of smooth muscles present.

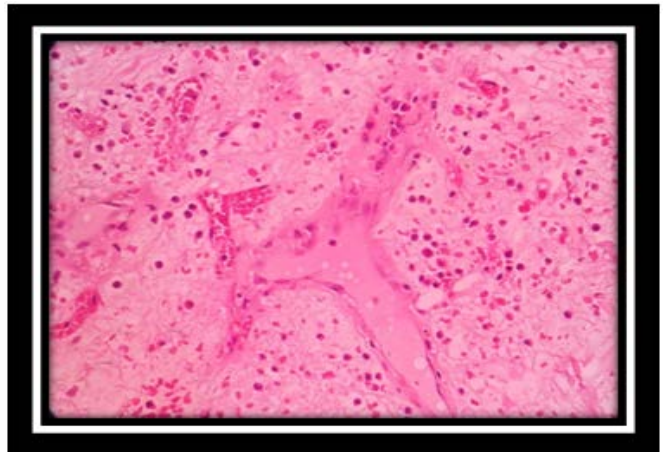


Figure 5: H&E-40X: A branching vessel containing plasma and also has scattered lymphocytes. The vessels are surrounded by inflammatory cells composed of mast cells and leucocytes. The stroma is edematous in nature.

Materials & Methods

A Five year study regarding the clinically diagnosed skin tags were done. The specimen with clinical diagnosis of skin tag were taken and analyzed from 2014 to 2019. Site, mode of presentation and sex incidence were noted.

Results

In the Six year period a total of 15 cases with the clinical diagnosis of skin tag/achrochodon were taken

which were confirmed histologically in 14 cases, except in the fifteenth case the histological features were that of a Superficial Angiomyxoma. This lesion had the following features namely there were scattered stellate to spindle cells against a background of myxoid stroma along with prominent vasculature. An analysis of these results showed that the maximum incidences of skin tag were noted in the age group of 35-60 years with more or less an equal distribution in both the sexes. The same is being depicted graphically (Fig. 6, 7, 8).

The highest incidence is noted in head and neck for 5 cases; where as in both thigh and vulva were the least for 2 cases. Histologically all were composed of mixture of fibro-collagenous fatty tissue along with blood vessels and nerve bundles.

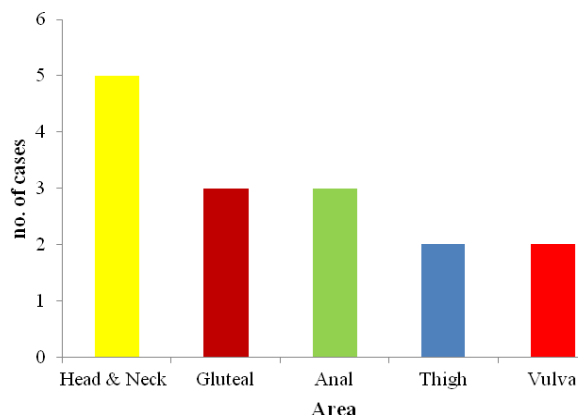


Figure 6: Case distribution

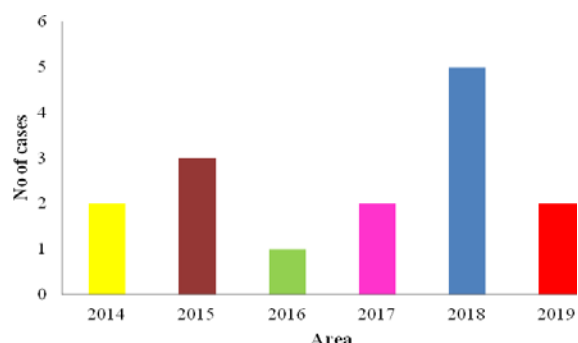


Figure 7: Case distribution

Sex Distribution

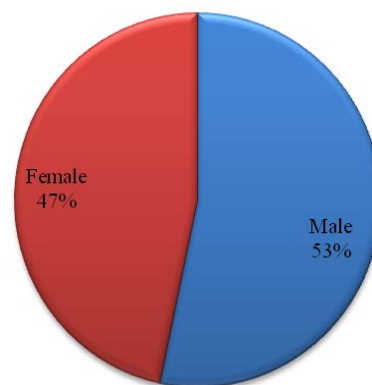


Figure 8: Case distribution

Discussion

Skin tag, is a common pedunculated lesion of skin also called as acrochordon/ soft fibroma, fibroma pendulum/cutaneous tag. These common benign lesions of skin may be associated with pregnancy, diabetes, intestinal polyposis. They are commonly found in intertriginous area like groin, gluteal region and are often removed for cosmetic reasons [3].

The present case is superficial angiomyxoma presenting as skin tag that occurred in upper outer quadrant of right breast. Superficial angiomyxoma/cutaneous myxoma arises from superficial tissue anywhere but has predilection for trunk, lower extremities and head & neck. Some also occur in genital area. Clinically they are slow growing polypoidal cutaneous lesions that are confused with a cyst, skin tag, neurofibroma. Grossly they are well circumscribed having a grey to white gelatinous cut surface. Thin fibrous septa traverse the neoplasm resulting in multinodularity. Microscopy shows a sparse proliferation of spindle to stellate shaped cells in an extensive myxoid stroma [4]. The individual cells have indistinct borders, oval nuclei with inconspicuous nucleoli. There is often a prominent vasculature mimicking myxoid liposarcoma. There can

be scattered neutrophils. Immunohistochemical stain CD34 express positivity for endothelial cells which was observed in the present case (Fig. 9,10).The present case was subjected to CD34 staining procedure and found to be staining the vascular component prominently; staining for Desmin was done and found to be negative [5]. Angiomyxomas rarely show positivity for S100 and cytokeratins. Desmin is positive for aggressive angiomyxoma and not for superficial angiomyxomas [6, 7].

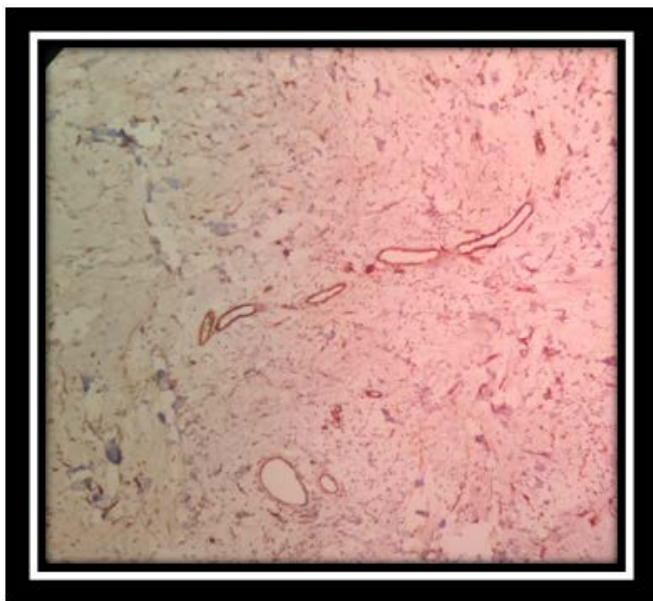


Figure 9: IHC-10X: Vessel wall stained with CD34

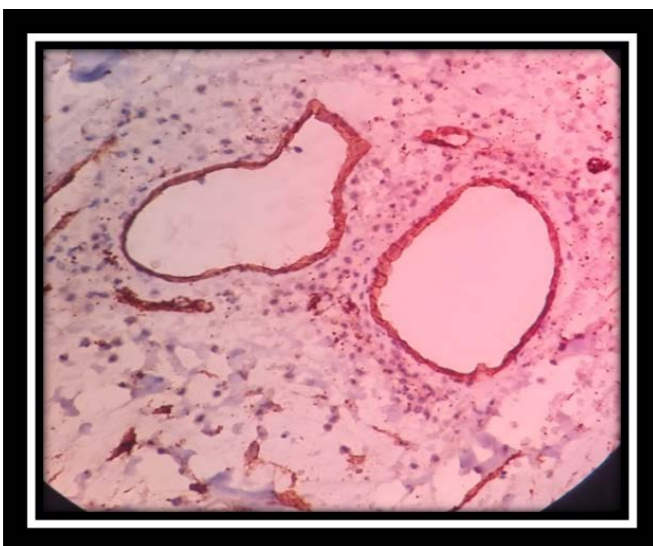


Figure 10: IHC-40X: CD34 stains the vessel (another field)

Treatment is surgical which is curative but local recurrence is possible .Superficial angiomyxoma, if multiple, because of its association with Carney Complex need to be investigated properly. The Carney Complex is a triad of cutaneous myxomas, cardiac myxomas, and spotty pigmentation with endocrine overactivity [1]. It is an Autosomal dominant disorder. Cutaneous myxoma can occur in eyelids, ears and breast. So individuals with superficial angiomyxomas of breast should be investigated for cardiac myxomas, since this entity can be fatal due to peripheral tumour emboli [8].

Conclusion

Fibroepithelial polyp in breast/ear may be histologically a superficial angiomyxoma and hence should be given more attention as they are more prone to be associated with Carney Complex.

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