Ischaemic Fasciitis: A Very Rare Entity with Unusual Presentation

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ABSTRACT
We are reporting a case of ischaemic fasciitis which occurred in a 55-year-old female with no debilitating or long bed ridden history. She presented with a large swelling over left gluteal region. On evaluation, swelling was found to be of size, 5x5 cm, slightly tender and with induration. The operative findings led to a probable diagnosis of a calcified lesion, due to its hard consistency. However, the microscopic picture was typical of ischaemic fasciitis, because of its characteristic central necrosis, vascular and atypical fibroblastic proliferations. Also seen was presence of foreign body giant cell reactions, inflammatory cells and extravasated RBCs.

Ischaemic fasciitis is a very rare pseudo sarcomatous proliferation of atypical fibroblasts, which has been described to be located over bony protuberances and said to develop most often in immobile elderly or debilitated patients. Recognition of this distinct entity as a reactive process, mostly associated with debilitation is rare in occurrence.

INTRODUCTION
Ischaemic fasciitis is a type of reactive, non-neoplastic, reparative or regenerative response to some sort of ischaemia, which is typically seen in older and debilitated patients at pressure points [1].

It belongs to a group of pseudosarcomatous lesions that include nodular fasciitis, proliferative fasciitis and proliferative myositis [1].

These soft tissue lesions are fascia-based, fibroblastic and myofibroblastic proliferations and as these lesions simulate soft-tissue sarcomas, either clinically, cytologically or even histologically, it is important to recognize and limit an overdiagnosis of a sarcoma [2].

CASE REPORT
A case of a 55 year-old female with no debilitating or long bed ridden history is being reported. There was a 3 month history of hospitality with bed rest for 8 days. She presented with a large swelling over left gluteal region. On evaluation, swelling was found to be of size, 5x5 cm, slightly tender and with induration. No history of ulceration or discharge, no local rise of temperature were present.

Excision specimen consisted of an irregular mass with brown yellow, soft to hard tissue, which measured 5x5x3 cm and cut-section revealed a greyish white lobular appearance with chalky white dots. So, the operative findings led to a probable diagnosis of a calcified lesion, due to its hard consistency.

The microscopic examination was typical of ischaemic fasciitis in view of its characteristic lesion, with irregular outlines showing central necrosis, vascular and atypical fibroblastic proliferations. Also seen was the presence of foreign body giant cell reactions, inflammatory cells, predominantly lymphocytes, with few polymorphs and extravasated RBCs.

Ischaemic fasciitis can be mistaken clinically, cytologically and histologically for a sarcoma. The histological findings which were seen in this case, when they were combined with the clinical history, were sufficient to avoid a misdiagnosis of a malignancy in a benign, proliferative lesion.

An early diagnosis, combined with an emergent surgical debridement, appropriate broad-spectrum empiric antibiotic treatment, and a multidisciplinary team approach, was essential for successful treatment of this patient.

DISCUSSION
Decubital ischaemic fasciitis was first described as “atypical decubital fibroplasia” in 1992 by Montgomery et al., [3]. It has been recently described as a distinctive fibroblastic proliferation which occurs predominantly in elderly, bed-ridden individuals and which is very rare in occurrence.

In ischaemic fasciitis, females tend to be more affected than males. Eight and ninth decades of life are the peak ages of its occurrence. However, younger age groups have also been reported [1].

Ischaemic fasciitis has been reported to occur in the deep dermis and subcutaneous tissues of pressure areas.
CONCLUSION

It is a rare, soft-tissue tumour sarcoma simulator. Clinically and also histologically, ischaemic fasciitis can mimic a soft tissue sarcoma and therefore, it is important to recognize this lesion as a pseudosarcomatous proliferation of fibroblasts. A morphologically distinctive zonal appearance with central fibrinoid necrosis, surrounded by granulation tissue like a vascular proliferation, mixed with a proliferative fasciitis like a fibroblastic component, is the hallmark of ischaemic fasciitis [4]. In addition, the presence of infarcted fat, fat necrosis, extravasated RBCs, haemosiderin deposition, myxoid changes, and an inflammatory infiltrate in variable amounts, are helpful in recognizing this lesion as a reactive proliferation instead of a sarcoma [4]. Pathologists should be aware that immobility or debilitation is a most significant finding in ischaemic fasciitis, but not always. A long history of immobility is present, as in our case, which is an unusual presentation. A subset of these lesions can occur in younger patients and infiltration of skeletal muscle and tendinous tissue, as well as, entirely intramuscular development, can be seen.

REFERENCES


