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Ischemic fasciitis: enhanced diagnostic resolution through clinical, histopathologic and radiologic correlation in 17 cases

Ischemic fasciitis is a pseudosarcomatous nodule or mass resulting from sustained or repeated pressure and consequent ischemia of soft tissue. Fibrin and hemorrhage expand its hypocellular epicenter bordered by enlarged (atypical, ischemic) fibroblasts and reactive vascular prominence resulting in diagnostically important histologic zonation. Although classically in bedridden patients, ischemic fasciitis owing to posture-related intermittent pressure in ambulatory adults is not well characterized; there has not been a thorough review of its presentation in ambulatory patients in the dermatology/dermatopathology literature. This article reviews the clinical, pathologic and radiologic presentation of 17 cases of ischemic fasciitis diagnosed over a 14-year period. Eighty-six percent of the six cases submitted by non-dermatologists were limb girdle/trunk lesions averaging 6.7 cm in greatest diameter while 90% of the eleven lesions submitted by dermatologists were elbow and forearm lesions averaging 2.3 cm. In no case was the diagnosis anticipated pre-biopsy by clinician or radiologist. Dermatologists submitted the majority of cases. Because ischemic fasciitis may simulate soft tissue sarcoma clinically and histologically, diagnosis helps prevent overtreatment. Zonal histopathologic structure may be shown by any form of biopsy and should motivate correlation with available radiologic studies. Importantly, determining a history of postural pressure at the site confirms the histopathologic diagnosis and avoids unnecessary excision.

Keywords: ischemic fasciitis, magnetic resonance imaging, pseudosarcoma, soft tissue tumor

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Ischemic fasciitis is a unique type of pressure sore displaying histologic features of involution and repair. Its pathogenesis is considered secondary to repeated pressure and resultant soft tissue ischemia similar to that of a decubitus ulcer but without ulceration. It is generally thought of as a condition of the elderly or physically disabled.[1] Lesions in that setting understandably involve soft tissue over bony prominences, particularly the shoulder, ribs, greater trochanter and sacrum, and are between 1.0 and 8.5 cm in greatest dimension. Eight of the 17 cases reported extend the clinical spectrum to ambulatory patients who developed ischemic fasciitis because of postural peculiarities. These occurred in the proximal forearm/elbow with a size range from 1.5 to 5.6 cm in greatest diameter (average 2.8 cm, SD 1.4 cm).

Ischemic fasciitis usually presents as a somewhat circumscribed, vaguely multinodular and often subcutaneous mobile mass. Overlying skin is usually unremarkable save for some elevation. Zonation is the histopathologic hallmark of ischemic fasciitis and may be appreciated under low and/or medium power. Ischemic hypocellular dermal and subcutaneous tissue becomes the fibrin-inflated red blood cell extravasation epicenter of injury at times with focal or even cystic myxoid change. Enlarged atypical fibroblasts and reactive vascularity demarcate the periphery. The enveloping reactive neovascularization consists of sterile-appearing granulation tissue and ectatic vessels.[2] Other findings include fibrin thrombi, red blood cell extravasation, hemosiderin deposition, multivacuolated muciphages that closely mimic lipoblasts and mild acute and chronic inflammation. These changes are predominantly deep, involving the dermis and subcutaneous tissue with possible extension into skeletal muscle, even to periosteum. Fibroblasts, which become enlarged and atypical in an ischemic environment, are a pitfall in diagnosis. The recognition of the lesion and its distinction from a sarcoma is essential to avoid excessive surgery and counsel the patient to modify the causative behavior.[3]

Owing to the clinical, radiologic and histopathologic mimicry of soft tissue sarcoma, ischemic fasciitis is well covered in the orthopedic, radiographic and anatomic pathology literature. Patients with this condition may be seen in dermatology for their superficial masses, particularly for lesions on the highly visible area of the distal upper extremity of ambulatory patients where the process will be smaller than the limb girdle/trunk lesions of debilitated/bedridden patients. Therefore, dermatologists and dermatopathologists should be aware of this entity to avoid contributing to overtreatment. To this end, the present report extends the work of Baldassano et al.[3] in increasing the dermatologic community's awareness of the clinical, histopathologic and radiologic profile of ischemic fasciitis in 17 patients.

Methods

A retrospective computer search of our pathology database for the years 2000 through 2015 returned 17 cases of ischemic fasciitis identified histologically and verified by clinical history. Ten of the 17 cases had pre-biopsy radiologic studies that were correlated with history and histopathologic impression at the time of original diagnosis, adding additional corroboration. The histopathologic clue of zonation was required for inclusion (Fig. 1). Acquisition of follow-up was obtained directly from patients in 10 cases and from treating clinicians in two.

Results

This series consists of seven excisions, three elliptical biopsies, two incisional biopsies, three radiologically guided core biopsies and two conventional dermatologic punch biopsies. Some degree of histopathologic zonation was manifest in all 17 specimens which suggested consideration of the diagnosis of ischemic fasciitis.

Clinical presentation

Clinical data from this series are summarized in Table 1. Seventeen patients, eight men and eight women between the ages of 56 and 94 years (mean age of 75, SD 10.4), were diagnosed with ischemic fasciitis by our inpatient and outpatient pathology services. In the present mix of hospital, general outpatient and dermatology specimens, dermatologists submitted the majority of specimens[4] followed by radiologists,[2] orthopedists,[2] a general surgeon and a family practitioner for a total of 17 cases. The span of time from the patient's first notice of the lesion to presentation ranged from 'recent' to 1 year with an average of 6 months (n = 10). The most commonly affected sites were forearm[5] and elbow.[5] In most cases, the overlying epidermis was elevated without color change (Fig. 2A) but was occasionally dusky. Palpable masses were circumscribed, and sometimes mobile. All specimens, radiologically guided cores, dermatology

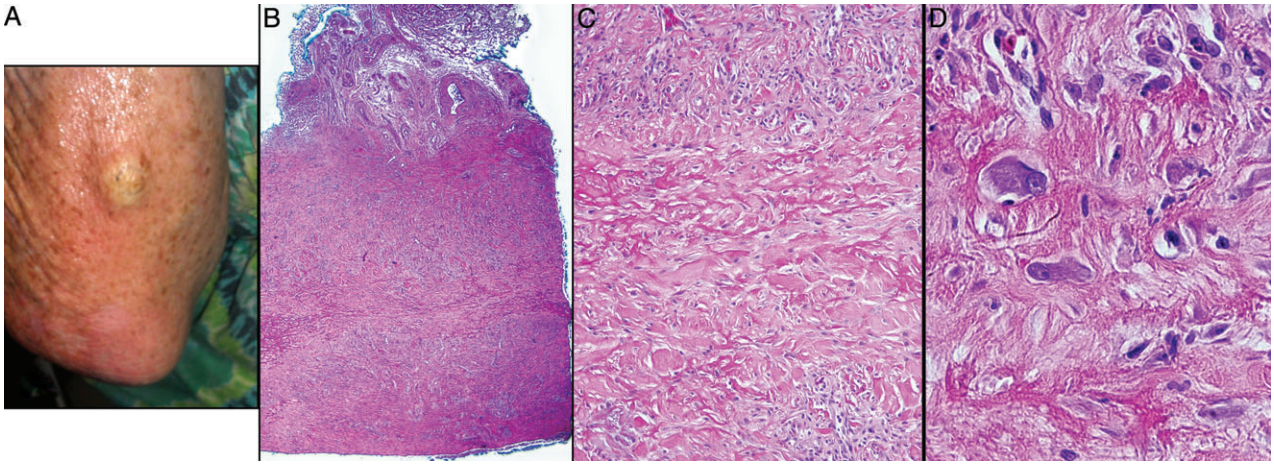

Fig. 1. Case 1. A) Clinical photo: An active 68-year-old female with a 'bad back' and unsteady gait first noticed a tender, pale, oval nodule on her dorsal right forearm 5 cm distal to elbow 1 year prior to biopsy. Only upon questioning after the biopsy was reported she did relate it to her three or four trips per week to the grocery store where she uses the solid metal bar of the shopping cart as a 'walker', leaning on it at precisely the site of the lesion. It had been painful whenever she set her arm down on any solid surface. B) Zonation in a punch biopsy. A low power view of 3.5 mm of a deep end of a 7.0-mm punch biopsy displays a transverse band of enhanced eosinophilia because of fibrin exudate bordered above and below by reactive vascular prominence (H&E, ×20). C) Reactive vascular prominence borders the transverse zone of fibrin extravasation above and below (H&E, ×200). D) Plump fibroblasts with expanded cytoplasm and prominent nucleoli in enlarged nuclei lie between the reactive vascular prominence and region of fibrin extravasation (H&E, ×400).

punches, incisional and excisional biopsies alike, had subtle to obvious histopathologic zonation that motivated clinical and radiologic correlation at the time of report preparation. No case in this series was represented by a shave biopsy because diagnostic changes are below the upper dermis. In no case was a diagnosis of ischemic fasciitis suggested, nor was a history of the causative behavior or posture submitted with any specimen. In 13 of the 17 specimens (76%), a history sufficient to explain cause was obtained before sign-out by requesting details from the clinician or direct telephone interview of the patient, with clinician approval, by the dermatopathologist (Table 2). More lesions arose from a repetition of intermittent pressure[6] than because of immobilization.[7]

Radiologic–pathologic correlation

In parallel with myositis ossificans, magnetic resonance imaging (MRI) studies of ischemic fasciitis often show characteristic zonation. Their circumscribed low-signal center (Fig. 3A,B) correlates with substantially devitalized soft tissue, expanded somewhat by sterile-appearing fibrin exudate and extravasated red cells (Fig. 3D). Radiologic reports on these cases usually included 'cannot rule out sarcoma' or the equivalent, motivating, if not forcing, biopsy. Small pockets of liquefactive necrosis without inflammatory cell reaction may be in this avascular center (Fig. 2B). Around the central area of maximal damage are swollen fibroblasts with enlarged nuclei and expanded cytoplasm (Fig. 2C) posing a potential pitfall for misdiagnosis as sarcoma. Around the central ischemic nidus and atypical fibroblastic cellularity is a rind of prominent reactive vascularity (Fig. 3B) that explains the peripheral enhancement on MRI with contrast (Figs. 4A and 5A). External to this may be fibrotic skeletal muscle with mild ischemic change including traumatized multinucleate skeletal muscle cells (Fig. 5B). When this zonation is represented in an adequate biopsy, misdiagnosis is best avoided by eliciting the causal postural history from the patient.

Follow-up

Follow-up was obtained in 12 of the 17 cases (71%), ranging from 2 weeks to 7 years and 10 months (Table 3). Five patients had no post-operative appointments and so were lost to follow-up (Cases 2, 9, 11, 13 and 14). Cases 3, 6, 10, 12 and 16 underwent substantial or complete excision with no mass remaining nor reappearing. Of the four lesions that were biopsied as ellipses (Cases 5, 7 and 8) or incisional fashion (Case 15), all remain lesion free at ≥5 year follow-up (Table 3). More instructive are the lesions that were minimally sampled. One sampled by punch biopsy had some persistent lesion at 1.5 months (Case 17). The 4-mm punch

Table 1. Clinical data

Case	Age	Gender	Site	Size (cm)	Clinical impression	Duration	Specimen
1*	68	F	Lateral forearm	1.5	Neuroma vs. angiolipoma	12 months	4 mm punch biopsy
2†	63	M	Forearm	2.0 × 2.0	Lipoma vs. ganglion vs. rheumatoid nodule	6 months	Excision
3	82	F	Inner forearm	Not specified	Rheumatoid nodule	Several weeks	Incisional biopsy
4‡	61	F	Forearm	3.0	Mass, suspect inflammatory neoplasm	3 months	Core
5	56	F	Elbow	3.0	Hard, friable nodule	Not specified	Ellipse
6	63	M	Elbow	1.5 × 0.6 × 0.4	Lipoma vs. subcutaneous fat necrosis vs. neoplasm	'Recent', no trauma	Excision
7	73	F	Elbow	1.1 × 0.6 × 0.3	Ganglion cyst	6 months	Ellipse
8	84	F	Elbow	1.5 × 0.6 × 0.5	Xanthomatous, bursal	Several months	Ellipse
9	87	M	Deltoid	2.0 × 2.0	Rheumatoid nodule	6 months	Excision
10	80	M	Shoulder	3.0 × 2.0	Necrotic muscle	6–9 months	Excision
11§	74	M	Tip of scapula	5.6 × 4.4 × 1.8	Primary neoplasm	3–6 months	Excision
12	82	F	Lower costal margin	6.0 (2.0 cystic center)	Fluid collection vs. abscess	Several weeks	Excision
13	73	M	Hip	4.0 × 3.0	Mass	Not specified	Core
14‖	76	M	Hip	3.0 × 3.0	Mass	4 months	Core
15	87	M	Hip	3.0 × 2.4 × 1.5	Reepithelialized decubitus ulcer	2 months	Incisional biopsy
16	94	F	Upper back	2.5	Lipoma vs. granuloma	12 months	Excision
17	76	F	Medial foot	2.5 × 1.5	Chronic dermatitis, amyloid	Not specified	Punch

M : F = 8 : 9; mean size (largest dimension): 2.8 cm; mean duration: 6 months (n = 10; range = 2–12 months).
*Illustrated in Fig. 1.
†Illustrated in Fig. 2.
‡Illustrated in Fig. 3.
§Illustrated in Fig. 4.
‖Illustrated in Fig. 5.

biopsy of a 1.5-cm forearm lesion of Case 1 was followed by complete regression at 2 years. A 3-cm forearm lesion minimally sampled by core biopsy had regressed completely by 6 months (Case 4).

Discussion

The most often reported sites of ischemic fasciitis are on around the limb girdles and sacral region, as well as chest wall over ribs[5] of immobile elderly or debilitated patients.[7] None of the 44 cases of Liegal and Fletcher were on forearms/distal extremities.[5] The smaller lesion size and distal extremity location that predominate in this series is probably related to the fact that 8 of the 17 cases presented in outpatient, ambulatory settings.

In 17 cases, the current review represents the largest series of ischemic fasciitis presented in the dermatopathology literature, and the third largest series to date.[8] In the past 5 years, three reports of ischemic fasciitis have been published in the dermatology literature in patients presenting with readily identifiable causes: abdominal lesion in a 10-year-old girl with chronic and ongoing torso brace use for the correction of congenital scoliosis,[6] sacral presentation in a 77-year-old wheelchair-bound woman[9] and a gluteal swelling in a 55-year-old woman with a history of 8-day hospitalization.[10] These short reports lack a thorough histopathologic differential and portray a different clinical scenario than that shown by the ambulatory patients in this series. Because ischemic fasciitis presents in ambulatory as well as debilitated patients, practitioners in the fields of dermatology and dermatopathology should be familiar with this benign entity so as to elicit corroborating history and thus avoid overtreatment.

Ischemic fasciitis is a unique type of pressure sore that develops mostly in the deep subcutis, occasionally extending to deep dermis, muscle, tendinous tissue and even periosteum.

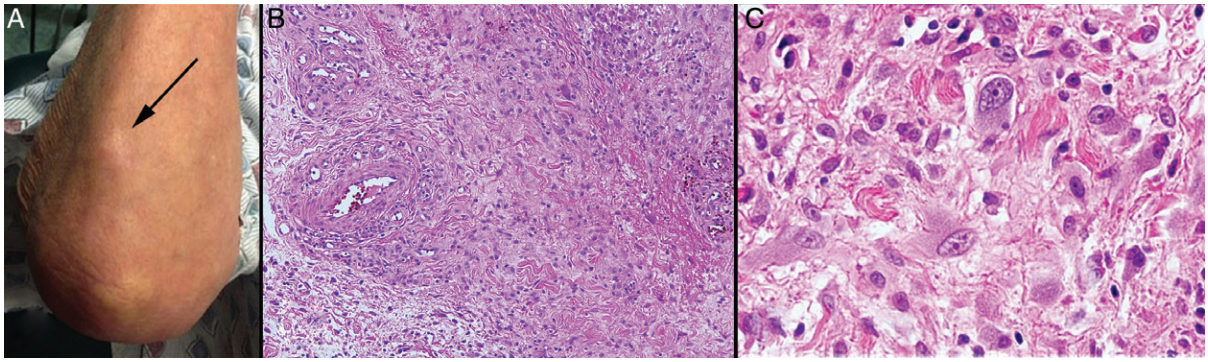

Fig. 2. Case 2. A 63-year-old, active Caucasian male noticed a tender, slowly enlarging soft, mobile mass on the extensor surface of his dominant forearm. The area had been sporadically painful for 6 months when he rested his arms on a desk or table and especially tender when subjected to substantial, daily pressure when steadying himself on the center console when getting in/out of his sedan. The specimen which 'shelled out like a lipoma' was submitted under the differential diagnosis of tumor, rheumatoid nodule, foreign body or ganglion. A) Pre-biopsy clinical photo: a pale elevation presents as a nodule beneath ulna 6-cm distal to the elbow. B) The pathology is all in lower dermis and fibrotic subcutaneous fat. Zonation as appreciated under medium power is shown from left to right with reactive vascular prominence (left) bordering plump fibroblasts (center) and extravasated fibrin (right) (H&E, ×100). C) Detail of the enlarged atypical fibroblasts beside the zone of fibrin extravasation (H&E, ×400).

Table 2. History of presentation

Case #	Site	Explanation
1	Forearm	Bad back, leans with elbow on metal bar of cart, using it as a walker while shopping 4+ times/week*†
2	Forearm	Daily pressure on center console when getting in/out of car*‡
3	Inner forearm	Unsteady balance; rests ulnar forearms on sink while washing dishes*
4	Forearm	Exercise apparatus put all body weight on forearms; additionally rests forearm on the counter/sink*
5	Elbow	Knits and crochets while resting on elbow*
6	Elbow	School teacher; puts pressure on arm of chair and desk top*
9	Deltoid	Bedridden because of debilitating rheumatoid arthritis
10	Shoulder	Hospitalized for pneumonia. Subsequently bedridden by debilitating back pain from spinal stenosis. Demerol injections
11	Tip of scapula	On valerian (sleep aid) and methocarbamol (muscle relaxant)
12	Lower costal margin	Senescent debilitation; habitually lays on that side
13	Hip	Nephrotic syndrome; anorexia and weight loss set stage for sedentary existence and pressure to the site
16	Upper back	Nodule appeared 3 months after hospitalization for a stroke
17	Medial foot	Ill-fitting, tight sneakers*

Eight of the 17 cases (47%) were on the 'forearm' or 'elbow'. In 13 of the 17 (76%) cases, history sufficient to explain lesion development was acquired after initial histopathologic evaluation as part of the diagnostic effort; in no case was such history initially submitted with the tissue. Seven of these cases (53%) resulted from repetitive use activities rather than immobilization.

*Indicates history of repetitive pressure to the site.

†Illustrated in Fig. 1.

‡Illustrated in Fig. 2.

Bone deformities, tumors[11] and periosteal thickenings[4] often precede development. Melorheostosis is a rare periosteal proliferative condition resulting in thick surface applications of bone thereby creating osseous 'bumps' predisposing to pressure consequences, such as ischemic fasciitis, over the site. The ischemic involution and reactive features resemble decubitus ulcer without skin break down. Pressure as the etiology unites ischemic fasciitis, decubitus ulcer, chondrodermatitis nodularis helicis/naris,[12,13] acanthoma (granuloma) fissuratum,[14] stalastatic pressure lesions and acanthoma supraolecranerum.[15] Even benign lichenoid keratoses have appeared over bony prominences after periods of sustained pressure.[16] Also related is post-operative alopecia whereby pressure-induced ischemia

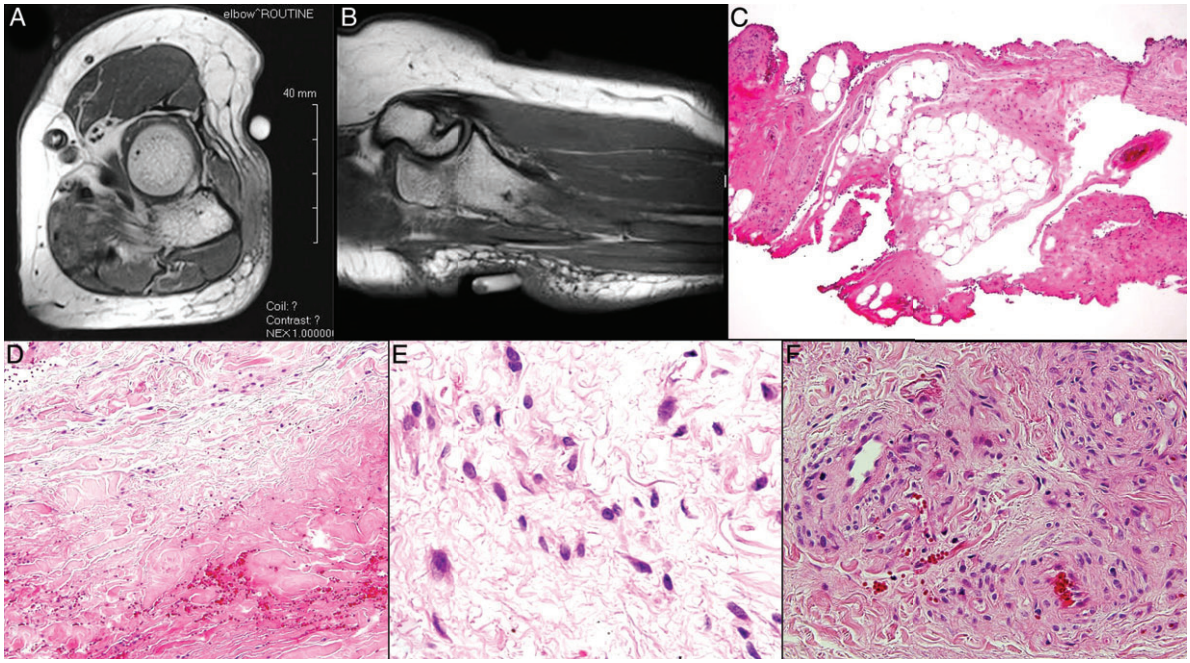

Fig. 3. Case 4. A 61-year-old working woman without debilitation presented to dermatology 3 months after developing a painless 1.0 × 1.5-cm swelling on the extensor surface of her proximal forearm, 6–7 cm distal to the olecranon, temporally related to her embarking on a pilates exercise regimen. Use of a pilates reformer placed her bodyweight on the lesion site. The patient also frequently leans on counters and sinks with this portion of her forearm in order to support her overweight frame. A and B) T2-weighted magnetic resonance imaging (MRI), the pathologic area is represented as a dark signal alteration within the dermal and subcutaneous soft tissues of the proximal forearm abutting the fascia of the anconeus muscle 7 mm in thickness and extending 30 mm along the dermal/subcutaneous layer with only spotty persistence of the normal bright fat signal because of ischemic fibrous involution of fat. Identifying the surface is a cylindrical high signal MRI marker. The official pre-biopsy radiology report favored an inflammatory process. C) An ultrasound-guided needle biopsy explains the MRI's dark signal alteration as owing to fibrosis accompanying involution of subcutaneous fat (H&E, ×100). D) Hemorrhage has spilled into a hypocellular epicenter of tissue at the lower right (H&E, ×100). E) Atypical fibroblasts in a loose myxoid background border the hypocellular zone (H&E, ×450). F) Prominent reactive vascularity with scant inflammatory cells is at the periphery (H&E, ×200).

promotes formation of vascular thrombi and breakdown of fat leading to a prolonged confluent hypoxia of hair follicles.[17] As a group, they are all examples of what could be called 'piezodermopathy', derived from the Greek piezo meaning 'to press or to squeeze'.

It is not necessary to use immunohistochemistry, molecular studies, etc. to diagnose ischemic fasciitis, which can be ascertained by clinico–radiologic–pathologic correlation. Additionally, specimens are unlikely to be submitted with ischemic fasciitis in the differential or with sufficient history or pre-biopsy radiologic studies. While several preoperative diagnoses were ventured in this series, mass, cyst and nodule/rheumatoid nodule were the most frequent at two cases each (Table 2). In no case was the diagnosis predicted clinically or radiologically. If the diagnosis is suspected because of histopathologic zonation, it is incumbent on the histopathologist to pursue corroborative history and available radiologic studies to provide a definitive diagnosis.

Local recurrence of ischemic fasciitis is very rare, having only occurred in one debilitated patient of the 44 total patients surveyed by Liegel and Fletcher.[5] If it is left untreated, it has been said to persist and is often painful; therefore, conservative local excision has been advocated.[3] However, after counseling patients that a certain activity or posture is causal, sustained behavioral modification led to regression of the mass over a few months in Cases 3 and 4 in this series, while disregarding such advice led to persistence; at 1.5 months follow up, the patient of Case 17 was still in the ill-fitting shoes responsible for the lesion.

Differential diagnosis

Ischemic fasciitis is characterized by a biphasic appearance with an outer fringe of enlarged, hyperchromatic and variable fibroblasts and reactive vascularity surrounding a central area of coagulative and even liquefactive necrosis with fibrin and red cell extravasation. This

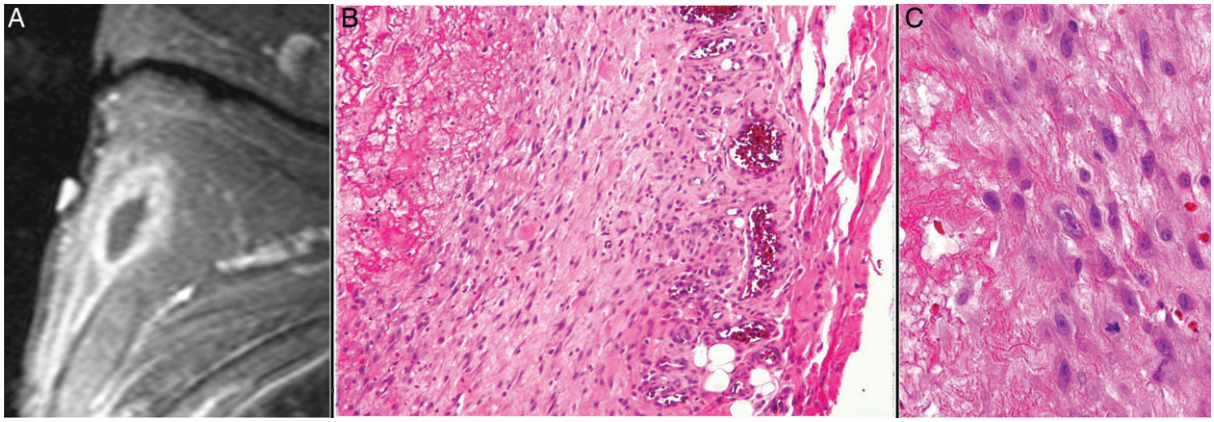

Fig. 4. Case 11. A 74-year-old man with multiple medical issues but no direct trauma presented with a 5-month history of a palpable mass over the tip of his scapula. Medications include valerian (sleep aid) and methocarbamol (skeletal muscle relaxant). By ultrasound, a poorly defined hypoechoic vascular soft tissue mass prompted biopsy after a magnetic resonance imaging (MRI) report favored 'primary neoplasm'. A) MRI defines a partly enhancing firm 5.6 × 4.4 × 1.8-cm soft tissue mass, within the superficial aspect of the latissimus dorsi muscle overlying the inferior and lateral margins of the scapula. The non-enhancing, dark center in the MRI study correlates with hemorrhagic necrosis and cystic change. A primary neoplasm was favored radiologically. B) Matching the MRI image is the classic zonation from fibrin-expanded center (left) through ischemic fibroblast layer (central) to an external reactive fibrovascular region (right) (H&E, ×200). C) Ischemic enlargement of fibroblasts bordering the acellular center should not be mistaken for neoplasm (H&E, ×450).

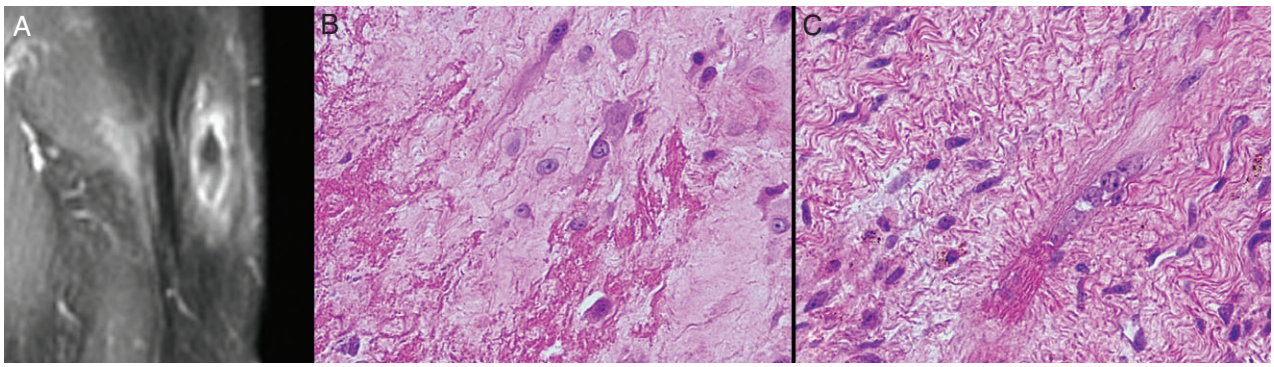

Fig. 5. Case 14. A 76-year-old man with nephrotic syndrome because of membranoproliferative kidney disease and prior history of lymphoma, had a 3-cm palpable mass on his right buttock, only very mildly tender to palpation. In the months preceding presentation for skin evaluation he experienced significant anorexia and weight loss, which set the stage for a more sedentary existence with sustained pressure at this site. Magnetic resonance imaging (MRI) was read as lymphoma prompting an ultrasound-guided needle biopsy. A) A sagittal T1-weighted MRI with gadolinium contrast displays a 2.0-cm peripherally enhancing nodule lateral to the greater trochanter of the femur. Ultrasound-assisted procurement of three core needle biopsies. B) The low-signal center consists of ischemic hypocellular fibrous tissue expanded by sterile-appearing fibrin exudate; scattered around it are a few enlarged ischemic fibroblasts (H&E, ×450). C) Beyond the rind of prominent reactive vascularity explaining the peripheral ring of enhancement around the central ischemic nidus is a zone of skeletal muscle with ischemic change including muscle regenerative giant cells and active fibroblasts (H&E, ×450).

zonation was evident in the six adequate open (Case 15), punch (Cases 1 and 17) and core (Cases 4, 13 and 14) biopsies. Fat necrosis, hemosiderin deposition and only a mild mononuclear inflammatory cell infiltrate are further clues to the reactive nature of this process.[5] Subcutaneous granuloma annulare (GA) appears as subcutaneous masses with poorly defined rather than circumscribed margins on MRI.[18] Histologically, subcutaneous GA, which is usually a lesion of youth on lower leg, is a septal panniculitis with basophilic rather than eosinophilic geographic necrobiosis because of mucin and neutrophil nuclear dust bordered by a palisade of inflammatory cells.[19] Rheumatoid nodule has a necrobiotic center but with the hypereosinophilia of fibrinoid necrosis within a palisade of histiocytes; the subcutis has a perivascular round cell infiltrate including plasma cells and occasionally eosinophils.[20]

Histologic mimicry of various spindle cell sarcomas, liposarcoma and epitheliod sarcoma make clinico–radiologic correlation of small samples essential to avoid misdiagnosis and

Table 3. Follow-up

Case	Specimen	Status	Interval	Behavior change
1	4-mm punch	Depressed, sometimes painful scar; no residual lesion	2 yrs	Yes. Attempts to shift support onto opposite forearm
3	Partly excised	NRL	1 yr 4 mo	NA
4	Core biopsy	Persistent lesion	6 mo	NA
5	Ellipse	NRL	10 yrs 6 mo	Yes. Avoids posture while crocheting
6	Excision	NRL	2 wks	NA
7	Ellipse	NRL	5 yr 2 mo	NA
8	Elliptical biopsy	NRL	3 yr 2 mo	NA
10	Excision	NRL	7 yrs 10 mo	NA
12	Excision	NRL	1 yr	Yes. Use of pillow to cushion area of pressure
15	Incisional biopsy	NRL	5 yrs	NA
16	Excision	NRL	3.5 mo	Yes. Avoidance of prolonged supine posture
17	Punch	Persistent lesion	1.5 mo	No. Shoes responsible for lesion remain in use

Post-operative follow up was obtained for 71% of all cases (n = 12). In eight cases, excision or excisional biopsy was curative (75%). Regression followed limited sampling in two patients. mo, month; NA, not applicable; NRL, no residual lesion; yr, year; wk, week.

overtreatment. On initial inspection, ischemic fasciitis may bring to mind a sarcoma. However, the broad zones of dense hypercellularity, extreme pleomorphism and atypical mitoses of sarcoma are not evident. Infiltrative growth and luminal multilayering of atypical endothelial cells distinguishes angiosarcoma from the rind of reactive vascularity of ischemic fasciitis. While immunohistochemistry is not necessary for diagnosis, focal positivity for smooth muscle actin (SMA) and desmin reactivity has been shown in up to 42% of specimens[5] which supports the fibroblastic/myofibroblastic nature of ischemic fasciitis and does not equate with myogenous sarcoma. The vacuolated lipoblasts of liposarcoma (which can have necrotic areas) and the keratin-positive cells of epitheliod sarcoma are not found. Ischemic fasciitis does not show the aggressive loco-regional behavior nor arcuate vascularity surrounded by bizarre tumor cells suspended in copious colloidal iron-positive mucin typical of myxofibrosarcoma (formally, the myxoid variant of malignant fibrous histiocytoma).[21]

Conclusion

Ischemic fasciitis is a reactive process that may present to, and be biopsied by, dermatologists. In ambulatory patients, it is most frequently encountered on the forearms. Ischemic fasciitis is usually submitted as a subtotal biopsy under a clinical diagnosis of cyst or neoplasm and without history of the etiologic posture or disability. Eliciting a behavioral pattern of intermittent pressure at the site will obviate the expense and possible misdirection of radiologic studies and the morbidity of biopsy. The histopathologic features and especially zonal gradations in the histopathology of ischemic fasciitis should motivate a request for clinical details and review of available radiologic studies so as to establish a firm, specific diagnosis through clinical/radiologic correlation.

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