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# ATYPICAL PROXIMAL CUTANEOUS ULCERS REVEALING LERICHE SYNDROME IN A WOMAN: A CASE REPORT

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## ABSTRACT

Leriche syndrome is a form of aortoiliac occlusive disease classically associated with intermittent claudication and absent femoral pulses, with erectile dysfunction completing the traditional triad in men. Cutaneous ulceration is uncommon and may initially suggest inflammatory or infectious dermatoses. We report a 59-year-old woman with a six-month history of painful ulcerations involving the suprapubic/lower abdominal region, upper medial left thigh, and left buttock. The disease began with an erythematous suprapubic plaque associated with exertional cramp-like pain consistent with intermittent claudication, followed by progressive necrosis and ulceration. During hospitalization, a necrotic lesion of the left great toe was also identified. Microbiological investigations, including GeneXpert testing and mycological examination, were negative, and skin biopsy showed nonspecific ulceration without granuloma. Vascular examination revealed bilateral absence of femoral, popliteal, and distal pulses, reduced warmth of the left leg, and delayed capillary refill. Computed tomography angiography demonstrated aorto-bi-iliac occlusion with distal reconstitution and absent opacification of the left tibial arteries distally, establishing the diagnosis of Leriche syndrome with ischemic tissue loss. The patient was transferred to vascular surgery and underwent aorto-bi-iliac bypass. At one-year follow-up, the documented proximal ulcer had healed with residual hyperpigmentation and scarring. This case emphasizes that painful proximal or atypically distributed ulcers, especially when associated with claudication, should prompt a complete peripheral vascular examination and early arterial imaging.

## KEYWORDS

Leriche syndrome; Aortoiliac occlusive disease; Ischemic ulcer; Cutaneous ulceration; Peripheral arterial disease

# MAIN ARTICLE

## INTRODUCTION

Leriche syndrome refers to symptomatic aortoiliac occlusive disease involving the distal abdominal aorta and/or iliac arteries. Its classic clinical pattern combines exertional lower-limb or buttock claudication, diminished or absent femoral pulses, and erectile dysfunction in men [1,2]. However, the presentation may be incomplete or atypical, particularly in women, and cutaneous findings can become the feature that brings the patient to medical attention [3]. Ischemic skin lesions related to aortoiliac disease are uncommon and may resemble pyoderma gangrenosum, infectious ulcers, pressure injury, or other inflammatory ulcerative disorders [3-6]. This diagnostic overlap is clinically important because delayed recognition of large-vessel ischemia may postpone revascularization, whereas inappropriate immunosuppression or repeated local treatment may expose the patient to additional risk. We report a woman whose painful proximal ulcers were the dominant dermatologic manifestation of severe aortoiliac occlusion.

## CASE PRESENTATION

A 59-year-old woman was admitted to the dermatology department for painful cutaneous ulcers that had evolved over six months. Her medical history was notable for hypertension diagnosed three years earlier and not regularly followed. Diabetes mellitus was not documented. The illness began with an erythematous plaque in the suprapubic region accompanied by cramp-like pain occurring during walking, consistent with intermittent claudication. Approximately three months later, the suprapubic lesion became necrotic and ulcerated, progressively enlarged, and was followed by a painful ulcer on the upper medial aspect of the left thigh and a smaller ulcer on the left buttock. She remained afebrile and her general condition was preserved.

On dermatologic examination, there was a painful ulcer measuring approximately 11 cm in greatest diameter in the suprapubic/lower abdominal region, with a red surface partly covered by black necrotic material and surrounding hyperpigmentation. A second ulcer on the upper medial left thigh measured approximately 9 cm, had irregular borders, necrotic areas, and hyperpigmented perilesional skin. A third, approximately 2-cm ulcer was present on the left

gluteal region (Figure 1). During hospitalization, a necrotic lesion of the left great toe was also identified (Figure 2).

Initial diagnostic considerations included pyoderma gangrenosum, cutaneous tuberculosis, and vascular ulceration. Laboratory investigations were largely noncontributory apart from an elevated C-reactive protein level of 57 mg/L. Microbiological investigations, including GeneXpert testing, were negative, and mycological examination was negative. Skin biopsy showed nonspecific cutaneous ulceration without granuloma. Glycemic and lipid investigations were reported as unremarkable.

Given the progression of tissue necrosis, the vascular examination became decisive. Femoral, popliteal, and distal lower-limb pulses were absent bilaterally. The left leg was cooler than the contralateral side, and capillary refill was prolonged beyond three seconds. These findings, together with the history of claudication and the new great-toe necrosis, strongly suggested severe arterial insufficiency.

Computed tomography angiography of the abdomen and lower limbs showed aorto-bi-iliac occlusion with reconstitution of flow at the internal and external iliac arteries, as well as absent opacification of the anterior and posterior tibial arteries in the distal left leg (Figure 3). The overall findings established a diagnosis of Leriche syndrome/aortoiliac occlusive disease with ischemic tissue loss, corresponding clinically to stage IV disease in the Leriche-Fontaine classification.

The patient was transferred to vascular surgery and underwent aorto-bi-iliac bypass. Clinical follow-up documented healing of the previously ulcerated proximal area at one year, with residual hyperpigmentation and scarring (Figure 4). The favorable wound evolution after revascularization supported an ischemic origin of the cutaneous lesions.

## DISCUSSION

Aortoiliac occlusive disease is most often related to atherosclerotic obstruction of the infrarenal aorta and iliac arteries. When symptomatic, it may produce the classic Leriche pattern of claudication and absent femoral pulses, with erectile dysfunction in men [1,2]. Because one element of the classic triad is male-specific, women may not fit the familiar clinical picture, and current vascular guidance emphasizes that peripheral arterial disease can be less typical in women [7]. In this patient, the history of exertional cramping was present from the beginning, but the conspicuous dermatologic lesions dominated the presentation.

The most distinctive feature of this case was the distribution of the ulcers. Instead of being confined to the distal leg or foot, the lesions involved the suprapubic/lower abdominal region,

upper medial thigh, and buttock, with later necrosis of the great toe. Similar proximal or perineal cutaneous manifestations of severe aortic or aortoiliac occlusion have been described, including pyoderma gangrenosum-like ulcers, sacral wounds, herpetiform perineal ulcerations, and abdominal/buttock ulcerations [3-6]. These reports demonstrate that severe inflow disease can produce dermatologic findings outside the usual distal distribution of arterial ulcers.

The pathophysiology of proximal skin necrosis in aortoiliac disease is likely heterogeneous. Marked reduction in inflow through the iliac circulation can compromise tissue perfusion, while some reported cases have proposed microembolization from an aortic thrombus as an additional mechanism [4,5]. The available clinical record in our patient does not establish a specific mechanism, so the lesions are best interpreted as ischemic manifestations associated with severe aortoiliac occlusion rather than attributed to a single pathophysiologic pathway.

The case also illustrates the importance of a focused vascular examination in the assessment of atypical ulcers. The absence of bilateral femoral and downstream pulses, a cooler limb, delayed capillary refill, and digital necrosis were highly informative bedside findings. Once severe arterial disease was suspected, computed tomography angiography defined the level and extent of occlusion and supported definitive treatment planning. Contemporary guidelines similarly place vascular imaging at the center of anatomical assessment when revascularization is being considered [7].

An inflammatory or infectious ulcerative disorder was initially plausible. The differential diagnosis included pyoderma gangrenosum and cutaneous tuberculosis, but microbiological studies were negative and histology was nonspecific without granuloma. More importantly, the subsequent recognition of major pulse deficits and angiographic aortoiliac obstruction provided a unifying explanation for the cutaneous and ischemic findings. A previous dermatologic series likewise reported aortoiliac occlusive disease presenting with pyoderma gangrenosum-like ulcers, underscoring the need to exclude large-vessel ischemia before committing to immunosuppressive treatment in selected ulcerative presentations [3].

Revascularization was followed by documented wound healing at one year. This temporal relationship further supports the causal role of arterial insufficiency. Although the optimal revascularization strategy depends on anatomy, comorbidity, local expertise, and current vascular recommendations, both surgical and endovascular approaches are used in aortoiliac occlusive disease [1,7]. In this patient, aorto-bi-iliac bypass achieved a favorable cutaneous outcome.

## CONCLUSION

Leriche syndrome should be considered in the differential diagnosis of painful, atypically distributed, or necrotic ulcers when claudication or other ischemic symptoms are present. Proximal ulcers involving the lower abdomen, groin, thigh, buttock, or perineal region do not exclude a vascular cause. Palpation of femoral and distal pulses is a simple but critical step that can redirect the diagnostic work-up. Early recognition of aortoiliac occlusion and timely vascular referral may prevent progressive tissue loss and avoid unnecessary treatment for inflammatory or infectious dermatoses.

## FIGURES

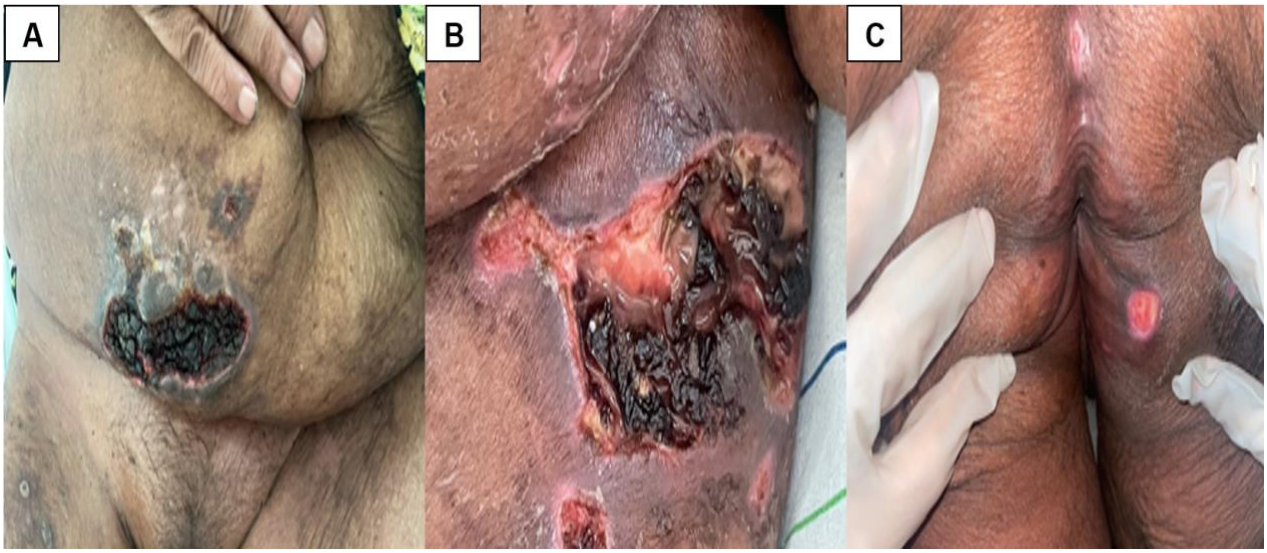


*Figure 1. Clinical presentation of the proximal ulcers. (A) Suprapubic/lower abdominal ulcer, approximately 11 cm in greatest diameter, with black necrotic tissue and hyperpigmented surrounding skin. (B) Ulcer of the upper medial left thigh, approximately 9 cm in greatest diameter, with irregular margins and areas of necrosis. (C) Left gluteal ulcer, approximately 2 cm in greatest diameter, with a red ulcerated surface.*

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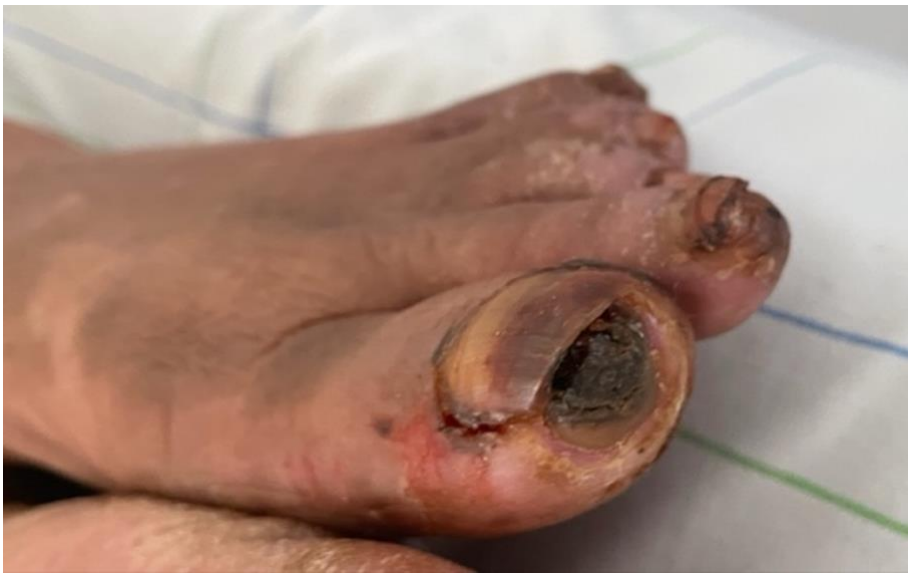

*Figure 2. Necrotic lesion of the left great toe discovered during hospitalization.*

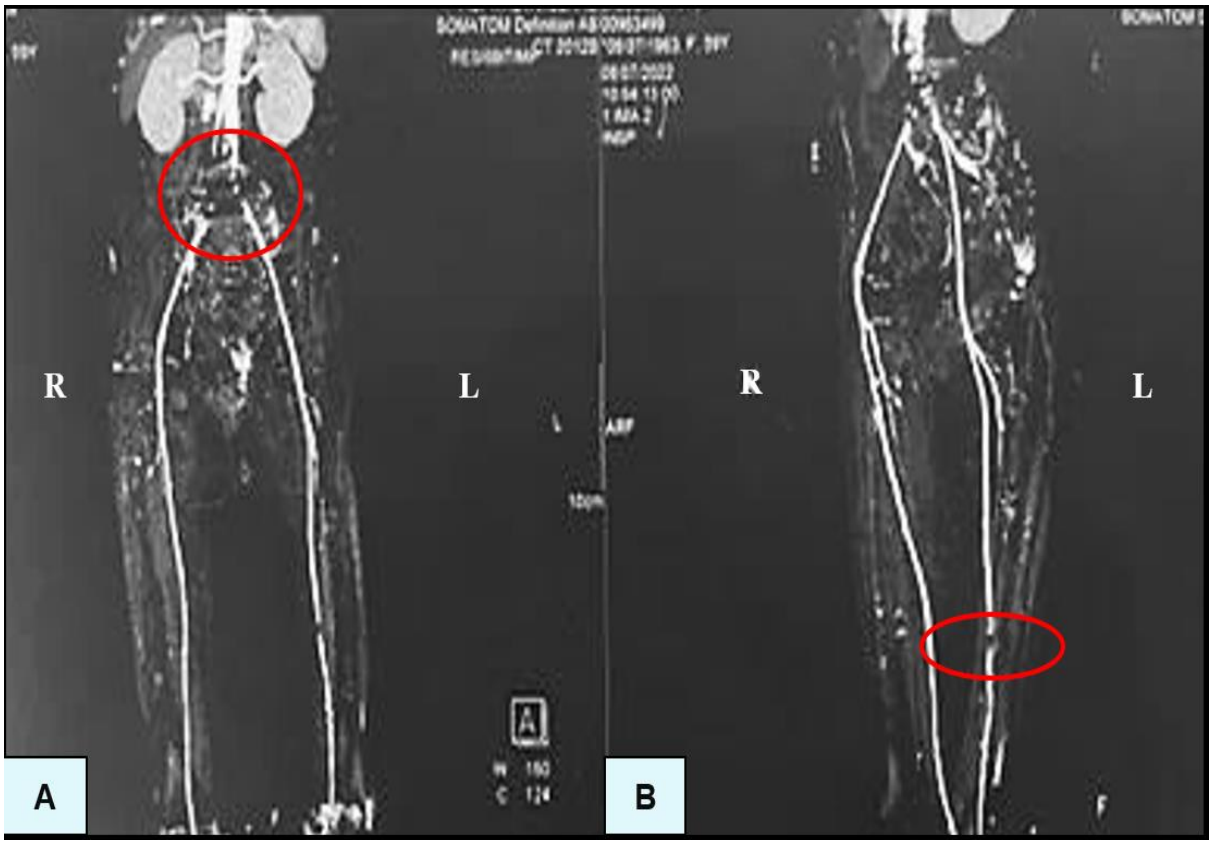


*Figure 3. Computed tomography angiography of the abdominal aorta and lower limbs. (A) Aorto-bi-iliac occlusion with distal reconstitution of the external and internal iliac arteries. (B) Absence of opacification of the left anterior and posterior tibial arteries.*

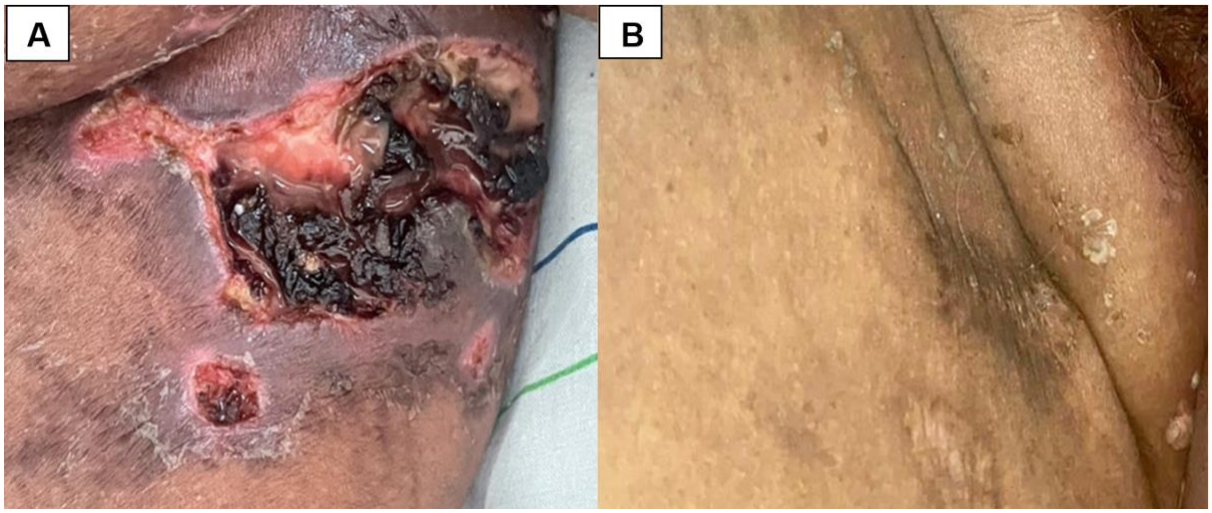


*Figure 4. Evolution after aorto-bi-iliac bypass. (A) Proximal ulcer before revascularization. (B) One-year follow-up showing healing with residual hyperpigmentation and scarring.*

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