

PTA of distal superficial femoral artery lesions

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Section: Interventional radiology

Case Type: Clinical Cases

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Patient: 72 years, female

Clinical History:

Successful angioplasty of distal sfa/ proximal popliteal lesions

Imaging Findings:

The diabetic patient was referred for non healing ulcer of the left foot (Stage IV Fontaine). Stage IV disease was present for 6 weeks. There was no history of tobacco smoking or other known risks for atherosclerosis besides diabetes. No peripheral pulses were palpable on the same limb. Angiography revealed multiple stenoses of the distal superficial femoral artery (SFA) and the proximal popliteal artery (Fig. 1 a,b). In addition, heavily diseased lower-limb arteries were found not showing lesions which were prone to percutaneous treatment. After passage of the diseased segment by use of a coated guidewire and a catheter, a noncoated 0.035 in guidewire was inserted through the multipurpose catheter which was exchanged for a 4 mm wide 4 cm long balloon catheter. After dilation over 45 seconds for each lesion, the postangioplasty result was considered satisfactory. During follow-up, the ulcer healed completely within 10 days.

Discussion:

Balloon angioplasty is indicated if short stenotic lesions are present. Especially in stage IV (Fontaine) PTA is recommendable to solve the immediate problem of endangered limb salvage. If possible recanalization of all obstructed vascular segments should be obtained. In that particular case, however, recanalization of the lower limb arteries was not feasible. Long-term results in femoral PTA is limited and is not dramatically improved by use of stents. That is, why stents cannot be recommended as a regular approach to improve PTA results in that region.

Differential Diagnosis List: Successful PTA of a distal femoral/ proximal popliteal arterial stenoses in stage IV disease

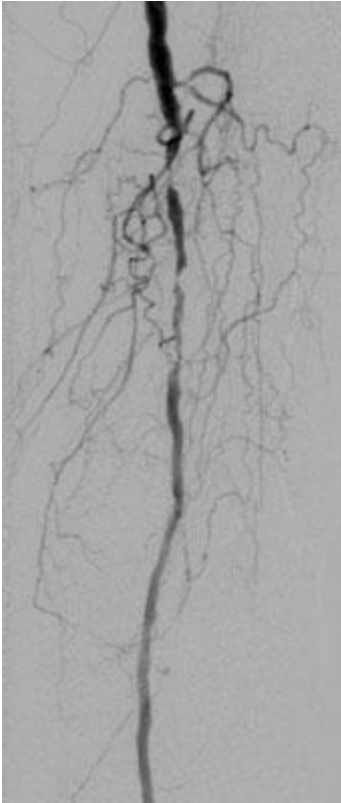
Final Diagnosis: Successful PTA of a distal femoral/ proximal popliteal arterial stenoses in stage IV disease

References:

Huinink MG et al. (1993) Risks and benefits of femoropopliteal percutaneous balloon angioplasty. J Vasc Surg. 1993 17(1):183-92;. (PMID: [8421335](#))

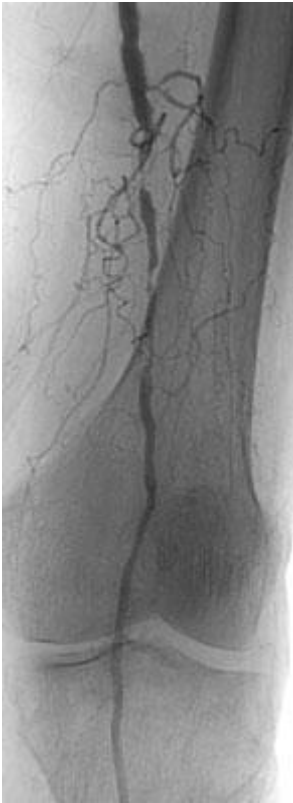
Figure 1

a



Description: Angiography reveals multiple lesions of the distal superficial artery and the proximal popliteal artery of left limb **Origin:**

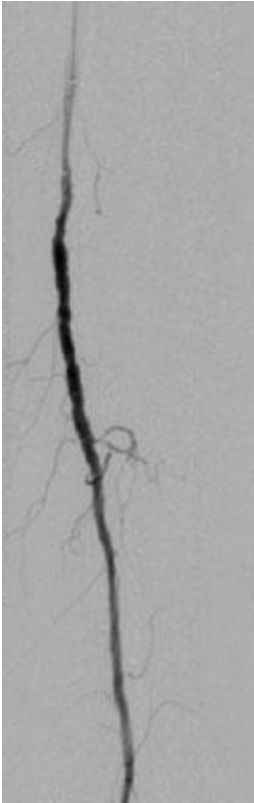
b



Description: Non-subtracted image reveals the anatomic location of the lesions **Origin:**

Figure 2

a



Description: After PTA using a 4 mm wide 4 cm long balloon catheter, patency is sufficiently restored

Origin: