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## SHORT COMMUNICATION

# Arterial calcification in rheumatoid arthritis

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### KEYWORDS

Arterial calcification;  
Rheumatoid arthritis;  
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**Summary** Arterial calcification most often occurs in patients with end-stage renal disease who undergo hemodialysis or hyperparathyroidism and it is independently associated with cardiovascular events and death. Calciphylaxis is uncommon in patients with rheumatoid arthritis. We present here development of arterial calcification in a patient with rheumatoid arthritis without end-stage renal failure and hyperparathyroidism.

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A 75-year-old woman, who was diagnosed with rheumatoid arthritis before 15 years ago, presented with right foot fingers ulcerations and severe pain. Her examination revealed ischaemic necrosis in the distal parts of the fourth and fifth digits of the right foot and absent dorsalis pedis artery pulse. There was no history of trauma or injury. None of the microorganism grew in swap culture and blood cultures. Bilateral knee radiographs revealed calcified larger vessels (Fig. 1). Amputation of right foot digits was performed. She

had been using low-dose steroids (<7.5 mg) and methotrexate for 8 years and had had chronic renal insufficiency for 5 years. Creatinine clearance had remained among 30–45 ml/min and she had never received treatment of hemodialysis or peritoneal dialysis. Levels of parathormon, calcium and phosphorus were normal.

Calcification of vessels most often occurs in patients with end-stage renal disease who undergo hemodialysis and in patients with hyperparathyroidism. Vascular calcification is independently associated with cardiovascular events and death. The prognosis is poor and necrosis occurs at sites of arterial obstruction. This disorder may cause painful skin ulcerations and necrosis at lower limbs and penis. Sometimes amputation of these areas is unavoidable.<sup>1</sup> Two rheumatoid arthritis patients with development of calciphylaxis have been reported in the literature up to now.<sup>2,3</sup> Treatment with steroids and methotrexate for long periods was proposed to be one of the possible causes of calciphylaxis development.

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**Figure 1** Bilateral knee radiographs show calcified larger vessels and joint destruction in the right knee (anterior and lateral views).



**Figure 1** (continued).

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