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Stasis dermatitis associated with arteriovenous fistula

S Lee¹, W Kim¹, KP Kang¹, YB Jang¹, HS Kwak², HW Kim³ and SK Park¹

¹Department of Internal Medicine, Renal Regeneration Laboratory, Research Institute of Clinical Medicine, Chonbuk National University Medical School, Jeonju, Republic of Korea; ²Department of Radiology, Research Institute of Clinical Medicine, Chonbuk National University Medical School, Jeonju, Republic of Korea and ³Department of Dermatology, Research Institute of Clinical Medicine, Chonbuk National University Medical School, Jeonju, Republic of Korea

Correspondence: SK Park, Department of Internal Medicine, Renal Regeneration Laboratory, Chonbuk National University Medical School, 634-18, Keum-Am Dong, Jeonju, 561-712, Republic of Korea. E-mail: parksk@chonbuk.ac.kr



Figure 1 | Brown hyperpigmentation and mild edema of the left fingers and adjacent portions of the hand.

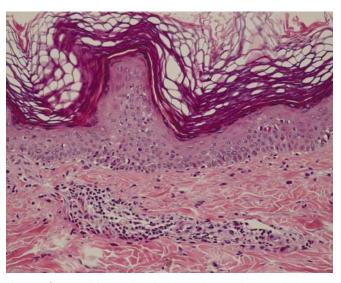


Figure 2 | A skin biopsy showing hyperkeratosis, acanthosis, basal pigmentation, and perivascular lymphoid infiltration (hematoxylin and eosin \times 200).

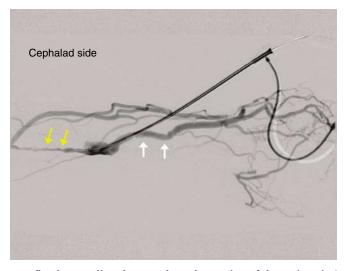


Figure 3 | A venogram of arteriovenous fistula revealing the complete obstruction of the main vein (yellow arrow) with reversal of flow (white arrow).

A 43-year-old diabetic man was referred to our hospital for numbness, warmness, mild swelling, and hyperpigmentation of the left hand. There was an arteriovenous fistula used for hemodialysis in the patient's left forearm, which had been present for 18 months. Engorgement of the left forearm veins was noticed. Cutaneous examination revealed brown discoloration and mild edema of the lower dorsal part of the left hand, especially the fingers (Figure 1). A skin biopsy from the dorsum of the left hand showed hyperkeratosis, acanthosis, and basal pigmentation. Perivascular lymphoid

infiltration and deep dermal vascular thickening were observed (Figure 2). Venogram of arteriovenous fistula revealed a complete obstruction of the draining vein with reversal of flow (Figure 3). After a percutaneous transluminal angioplasty of the obstructed vein, and surgical ligation of vein showing reversal of flow were performed successfully, numbness, warmness, and swelling of the left hand improved. Vascular access malfunction may be associated with venous hypertension, resulting in chronic venous stasis and stasis dermatitis.