Rapid disappearance of a massive iatrogenic haematoma of the left hand following radial coronary angiogram

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A 73-year-old man with a medical history of coronary artery disease and status post coronary artery bypass grafting underwent elective coronary angiography for progressive left ventricular systolic dysfunction using the radial artery access. After introduction of a 6 French sheath in the left radial artery, 2500 IU of unfractionated heparin were administered intravenously. Coronary angiography revealed diffuse three-vessel disease with patent grafts. Following removal of the radial sheath, manual pressure was applied locally for ten minutes followed by application of a pressure bandage.

Half an hour later the patient noticed swelling of his left hand. Within the following ten minutes the hand turned dark blue (figure 1). He experienced no pain or muscular weakness. Physical examination revealed oedema of the hand, but no neurological deficit. Radial and ulnar artery pulses were palpable, but capillary refill was mildly impaired. After removing the bandage, the left forearm was lifted in an arm sling. The oedema disappeared during the following hour. Five days later the skin of the left hand had regained its natural colour (figure 2).

We hypothesise that extensive venous congestion caused diffuse capillary bleeding in the left hand. Extravasated blood cells were cleared by macrophages through phagocytosis within less than five days, explaining the rapid discoloration of the skin.

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Figure 1. The left hand showing severe haematoma.



Figure 2. Five days later the left hand later regained its natural colour.