

**Figure 3. Haemostasis achieved with successful deployment of the Graft-Master covered stent (arrowed). Femoral flow is well preserved.**



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Sajani N, Bogart DB (2013) Retroperitoneal hemorrhage as a complication of percutaneous intervention: report of 2 cases and review of the literature. *Open Cardiovasc Med J* **7**: 16–22. <https://doi.org/10.2174/1874192401307010016>

Tiroch KA, Arora N, Matheny ME, Liu C, Lee TC, Resnic FS (2008) Risk predictors of retroperitoneal hemorrhage following percutaneous coronary intervention. *Am J Cardiol* **102**(11): 1473–1476. <https://doi.org/10.1016/j.amjcard.2008.07.039>

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### LEARNING POINTS

- Femoral angiography after cardiac catheterization is now routinely performed to confirm that an arterial closure device can be safely deployed.
- This allows early diagnosis of ilio-femoral haemorrhage into the retroperitoneal space.
- Covered stents can be promptly deployed to stem the haemorrhage and prevent haemodynamic collapse.

BMC2 (Blue Cross Blue Shield of Michigan Cardiovascular Consortium) registry. *JACC Cardiovasc Interv* **3**(8): 845–850. <https://doi.org/10.1016/j.jcin.2010.05.013>

## Images in Medicine

# Spontaneous pulmonary embolism following a recently thrombosed, disused haemodialysis fistula

**A** 52-year-old man noticed that his disused fistula was no longer functioning and had become red, firm and tender. It had been unused for 6 years, following a successful renal transplant. Examination revealed a mildly tender, erythematous fistula, with no palpable thrill. Following discussion with the transplant team, he was discharged with antibiotics and imaging was felt to be unnecessary.

He re-presented with left-sided pleuritic chest pain 1 week later. Clinical examination was essentially normal. Chest X-ray showed multiple areas of plate atelectasis and patchy left basal consolidation (*Figure 1*). With no infective symptoms or signs, he went on to have a computed tomography pulmonary

angiogram which showed a left lower lobe pulmonary embolism (*Figure 2*). He was anticoagulated and made an unremarkable recovery.

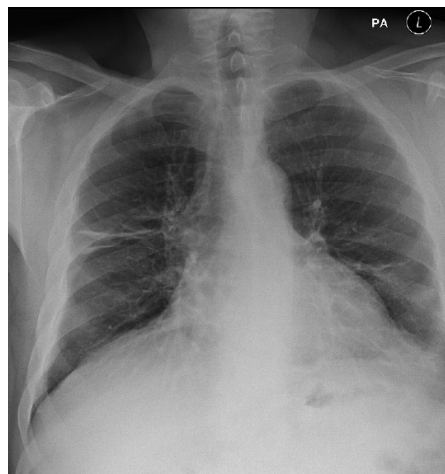
The link between de-clotting thrombosed fistulae and pulmonary embolism is well described (Toosy et al, 2008; Shah et al, 2012) but to the best of the authors' knowledge, this is the first case describing the phenomena of a pulmonary embolism

occurring following thrombosis of a disused haemodialysis fistula. **BJHM**

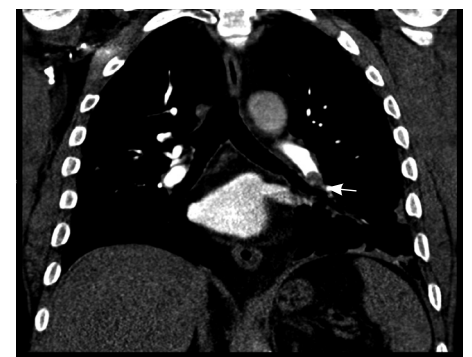
Shah A, Ansari N, Hamadeh N (2012) Cardiac arrest secondary to bilateral pulmonary emboli following arterio-venous fistula thrombectomy: a case report with review of the literature. *Case Rep Nephrol* **2012**: 831726. <https://doi.org/10.1155/2012/831726>

Toosy K, Saito S, Patrascu C, Jean R (2008) Cardiac arrest following massive pulmonary embolism during mechanical de-clotting of thrombosed hemodialysis fistula: Successful resuscitation with tPA. *J Intensive Care Med* **23**: 143–145. <https://doi.org/10.1177/0885066607313002>

**Figure 1. Chest X-ray showing multiple areas of plate atelectasis and patchy consolidation at the left base.**



**Figure 2. Computed tomography pulmonary angiogram showing left lower lobe pulmonary embolism (arrow) within the segmental and sub-segmental pulmonary arteries, plus some consolidation within the left lower lobe.**



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