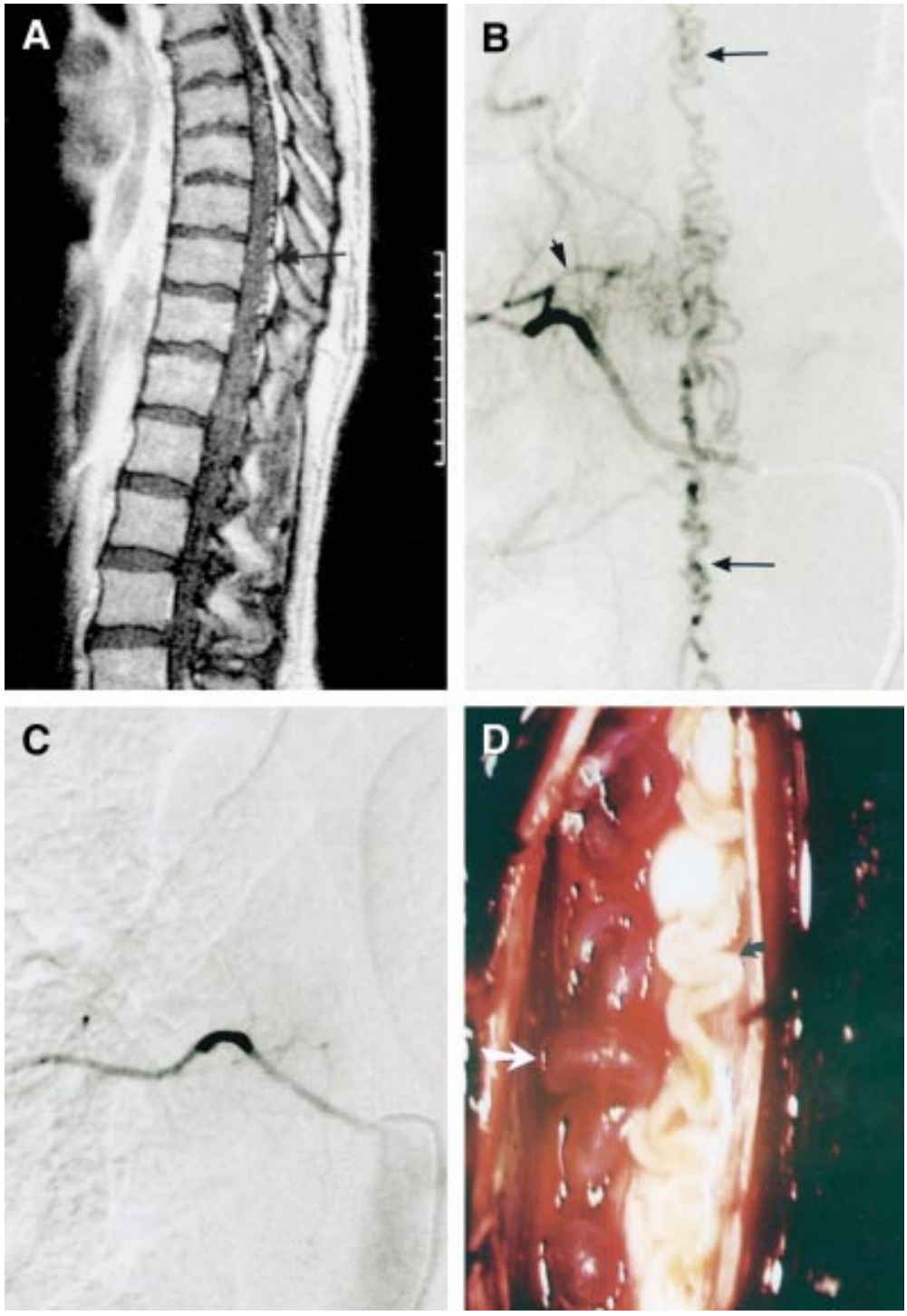
NEUROLOGICAL PICTURE

Recanalisation of spinal dural arteriovenous fistula after successful embolisation



A 55 year old man presented with a 3 month history of progressive sensorimotor paraparesis. Examination showed a spastic paraparesis with grade III weakness and a sensory level at T11.

Sagittal gadolinium enhanced T1 weighted images showed multiple areas of enhancement within the spinal canal posterior to the lower thoracic spinal cord (arrow, figure A), and 3D phase contrast magnetic resonance angiography obtained in the coronal plane confirmed dilatation of the coronal venous plexus. Selective angiography of the right seventh intercostal artery showed a spinal dural arteriovenous fistula (AVF) arising from a spinal ramus branch (small arrow) and draining into a hypertrophied coronal venous plexus (large arrows, figure B). Transcatheter embolisation using 30% N-butylcyanoacrylate achieved complete occlusion of the lesion (figure C), and the patient initially made a clinical improvement.

The patient's paraparesis recurred within 6 months, at which stage surgery showed recanalisation of the AVF (white arrow, figure D). The ghost of a collateral collapsed coronal plexus was noticed (black arrow, figure D), a remnant from the previous embolisation. The draining medullary vein from the AVF was identified and transected, and the patient made a good postoperative recovery with gradual improvement in his neurological status.

D BIRCHALL
D G HUGHES
Department of Diagnostic Radiology, Hope Hospital, Stott Lane, Manchester M6 8HD, UK

C G H WEST
Department of Neurosurgery

Correspondence to: Dr D G Hughes
dhughes@fsl.ho-man.ac.uk