

A difficult diagnosis of severe loin abdominal pain

Another imitation of other pathology

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Classic presentations may turn out to be something very different and totally unexpected.

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Working in the emergency department you see a different, and generally more severe, spectrum of presentations than you do in your general practice. One of the positives is that by having access to diagnostic techniques and specialist opinions, a reasonable working diagnosis can often be made. However, this does not always happen, and at times classic presentations turn out to be something very different and totally unexpected.

One Saturday day shift you attend to a 57-year-old man who had sudden severe (10/10) sharp pain in his right flank, with no urinary symptoms. His observations, examination and full blood count work up was normal.

Urinalysis showed a small amount of blood. A CT KUB (CT scan of the kidneys, ureters and bladder) was also normal, with no calculi and no hydronephrosis seen. The patient's pancreas and bowel (appendix) appeared normal. Mild calcification was demonstrated in the distal aorta.

There was no fracture of the spine, and chest x-ray was also reported as normal, with no air under the diaphragm.

The patient was reviewed by an emergency medicine staff specialist and a physiotherapist. No cause of his pain could be found and he went home with analgesia (he lived locally).

You find out later that the patient had returned in the late afternoon of the next

day, with severe bilateral flank colicky abdominal pain (10/10) that could not be relieved by analgesics. He had nausea and vomited twice.

The distressed patient was given morphine IV and an indomethacin suppository to relieve the pain and was then fully assessed again. A surgical registrar and consultant reviewed the patient, and the history of night sweats, mild fever and past cholecystectomy suggested cholangitis as a possible diagnosis.

ADMISSION AND INVESTIGATION

The patient was admitted under the surgeon, intravenous antibiotics and fluids and nil by mouth were commenced and an upper abdominal ultrasound organised for the next morning.

His pain was only decreased to 5/10 with the narcotic analgesia, and because of his significant pain at the time of the scan an incomplete study was performed.

CT AORTIC ANGIOGRAM REPORT

There is a type B aortic dissection originating just distal to the subclavian artery with both the coeliac and superior mesenteric arteries supplied by the true lumen with intimal flap extending into the origin of both vessels.

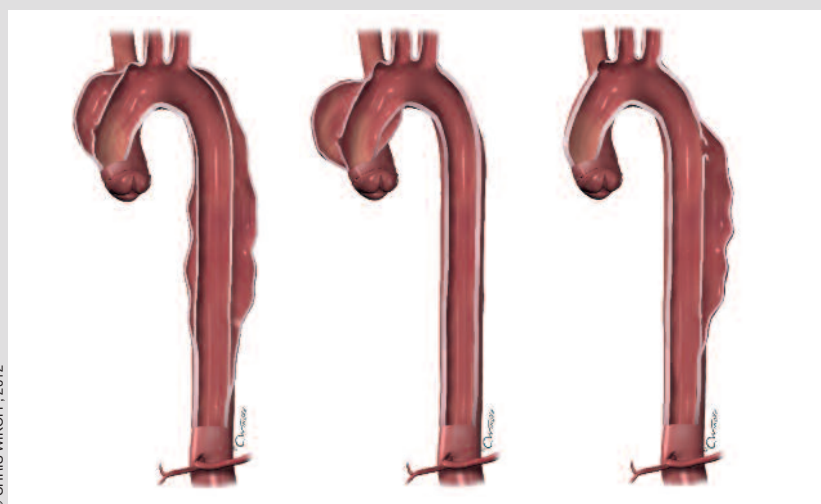
The distal extent of the dissection is within the proximal right external iliac artery and the proximal left common iliac artery.

The right renal, internal and external iliac arteries branch off the true lumen. The inferior mesenteric, lumbar, left renal and left common iliac artery originate from the false lumen.

No carotid or vertebral arterial involvement.

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CLASSIFICATION OF AORTIC DISSECTION: DEBAKEY AND STANFORD SYSTEMS^{1,2}



DeBakey	I (60%)	II (10-15%)	III (25-30%)
Stanford	A (Proximal)		B (Distal)

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Note was made, however, of an abdominal aortic dissection.

The patient was immediately moved into a resuscitation bay. Fortunately, immediately and over the next six weeks, all the resources of a major teaching hospital were available to the patient. You followed his progress as outlined below.

An urgent CT aortic angiogram revealed a Stanford type B aortic dissection, as indicated in the report in the box on page 74. The box above shows the classification of aortic dissection.

With type B aortic dissection, unless complications occur such as impending rupture or ischaemia (visceral, limb or spinal) due to arterial occlusion by the dissection, there is debate whether surgical intervention by stenting improves outcomes over conservative management, especially blood and pulse pressure control by β -blockers (e.g. metoprolol).

INTENSIVE CARE

The patient was cared for in intensive care. Blood pressure control was difficult,

requiring β -blockers, glyceryl trinitrate and sodium nitroprusside infusions.

Increasing pleural effusions necessitated a drain, and free fluid in his pelvis was also removed. His liver function tests were elevated.

Ten days after admission, his severe pain was ongoing and blood pressure still difficult to control. Because of this, the patient was stented – the vascular surgeon/interventional radiologist inserted by catheter two self-expanding overlapping vascular stents into his thoracic aorta through a femoral puncture (Figure).

Blood pressure control was still difficult, and some renal ischaemia was shown on a CT scan of the stented aorta. No other ischaemia or cardiac damage was found.

RECOVERY

The patient remained mentally alert throughout the six weeks after the surgery, and was then discharged from hospital with support and follow up. He was looking forward to starting work



Figure. CT of the stented aorta.

Courtesy of Associate Professor Anthony Grabs, Vascular Surgery, St Vincent's Hospital, Sydney.

again; fortunately, his work was heavily computer-based, and he was able to work from home initially.

All involved in the case were grateful and pleased of the good outcome, especially after the initial diagnostic difficulty. **MT**

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COMPETING INTERESTS: None.