## Collateral miracle—reformation of iliac and femoral arteries by collaterals from bilateral subclavian arteries following contained rupture of abdominal aortic aneurysm in a hypertensive female



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Rupture of an abdominal aortic aneurysm is readily diagnosed when the triad of abdominal or back pain, shock and a pulsatile abdominal mass are present. However in a few cases, a chronic contained ruptured abdominal aortic aneurysm can present in a multitude of manners rather than as life threatening haemorrhage. In our case we are reporting a 41 year old hypertensive female who developed claudication pain in both her lower limbs. Imaging later revealed that she had a contained ruptured abdominal aortic aneurysm, a thing she was previously unaware of, with collaterals from the bilateral subclavian arteries supplying her femorals.

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A 41-year-old female presented to our institution with a history of severe occasional abdominal pain (for 1 year), associated with bilateral lower limb claudication pain. Results of her computed tomography (CT) aortogram showed a thrombosed contained ruptured aortic aneurysm

just distal to the origin of the celiac artery with nonopacification of the abdominal aorta just distal to the origin of the right renal artery Figs 1, 2 and 5. Opacification of the bilateral common iliac and femoral arteries caused by collateral formation from bilateral subclavian arteries was seen Figs 2, 3 and 4. Elsewhere, Alshafei and Kamal [1] reported a case of a contained rupture abdominal

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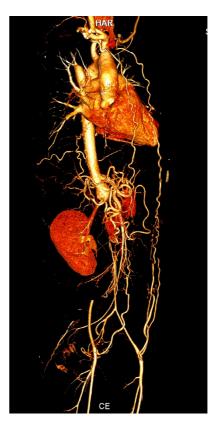
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Figure 1. MIP CT image of the aorta, showing contained rupture just distal to the origin of the right. CT = computed tomography; MIP = maximum intensity projection.



Figure 2. VRT image showing the course of the collateral on the left side: clear charted one originating from the subclavian artery. *VRT* = *volume rendering technique.* 



 $Figure \ 3. \ \ VRT \ image \ from \ the \ right \ anterolateral \ aspect, \ showing \ the$ course of both anterior collaterals. VRT = volume rendering technique.



Figure 4. Close-up VRT image from the left side, showing the origin of the left collateral from the left subclavian artery. VRT = volume rendering technique.



Figure 5. VRT thin images showing the spatial orientation of the bilateral collaterals supplying the common iliac arteries. VRT = volume rendering technique.

aortic aneurysm with intermittent bilateral claudication with an abdominal mass. Meanwhile, Higgins et al. [2], Booth and Galland [3], and other groups reported cases with contained ruptured aneurysm manifesting in various forms [4–7].

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from the participants included in the study.

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