

Clinical News Corner

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March, 2010

AndraStent XL in Aortic Coarctation

References: Dr. G. Agnoletti, Pediatric Cardiology, Ospedale Infantile R. Margherita, S. Anna Turin (Italy)

Case Report:

A 15 year old girl had dyspnoea during exercise.

Clinical examination was referred to be normal. Since 3 months she complained from headache and was found to have systemic hypertension. Thus, the diagnosis of aortic coarctation was made.

She was referred to our department for percutaneous treatment of coarctation.

Clinical examination showed good clinical condition, weight 60 Kg, length 164 cm, no murmur, absent femoral pulses.

ECG was normal. Echocardiography: showed mild hypertrophy of the left ventricle, bicuspid aortic valve, tight aortic coarctation with high velocity diastolic flow trough the aortic isthmus. Cardiac catheterization was performed under sedation and antibiotic prophylaxis. Heparin (2500 UI/Kg) was administered.

Aortography showed a typical aortic coarctation immediately after the origin of the left subclavian artery (figure 1). Aortic pressure before the coarctation was 136/72 mmHg and after the coarctation 106/65 mmHg

The aortic diameter was 13mm before the coarctation, 5mm at the coarctation site and 15 mm after the coarctation.

A 39 mm Andrastent (**Andramed, Reutlingen, Germany**) was mounted on a 12x40mm BiB balloon (Numed Hopkinton, USA) and hand inflated until complete expansion.

A post-dilatation was performed by using a 15x40mm BALT balloon (BALT extrusion, Montmorency, France).

After stent implantation aortic pressure before and after the stented area was 106/65mmHg.

Aortic angiography showed regular aortic profile without dissection (figure 2). The girl was discharged the day after under aspirin 100mg/day. She has no symptoms and systemic pressure is normal.

Figure 1
Typical aortic coarctation in AP (A) and lateral (B) view. Note the presence of collateral circulation (*).

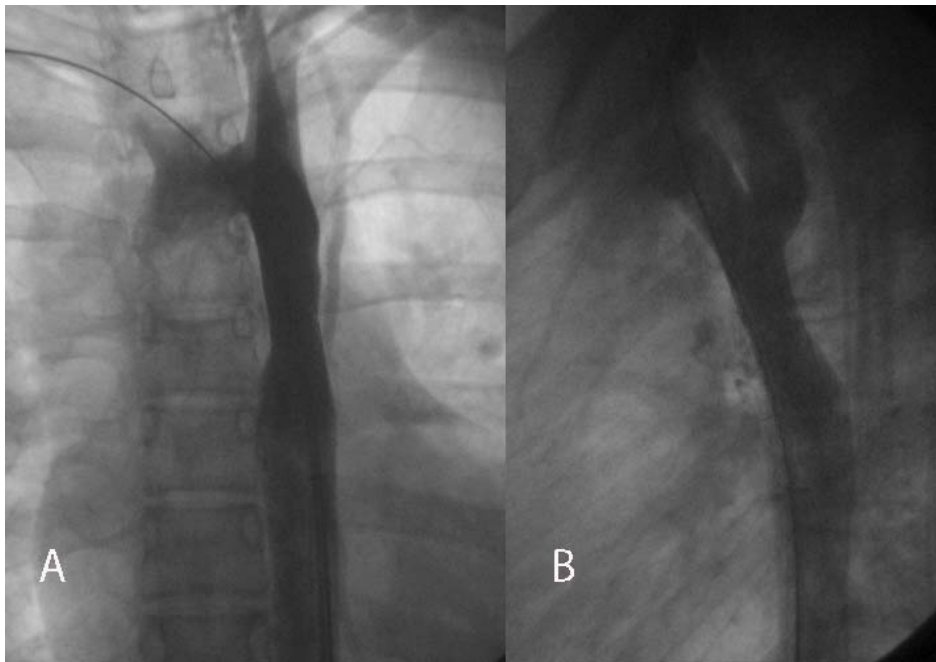
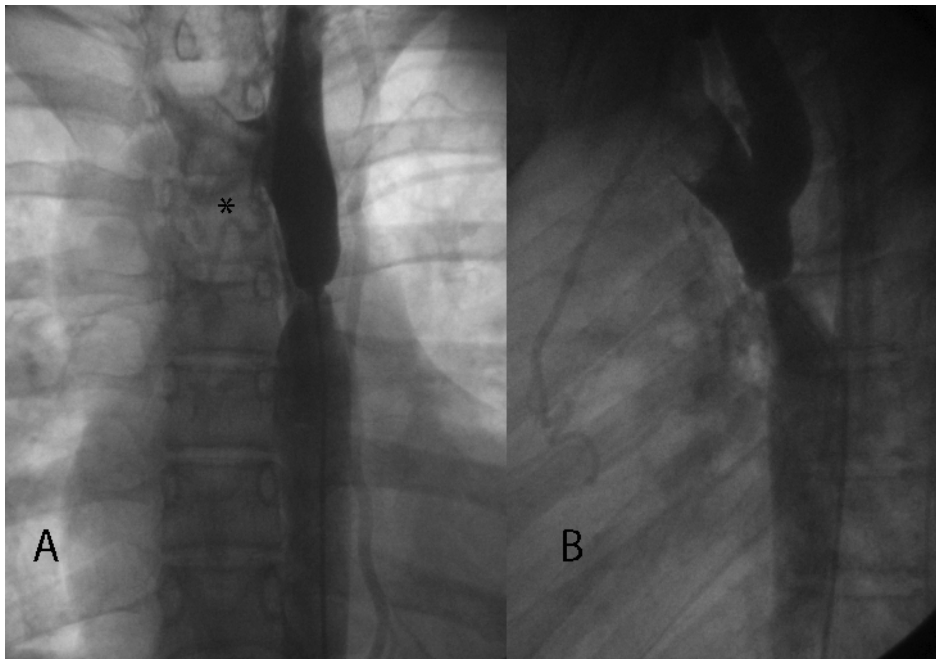


Figure 2
After stent implantation, in AP (A) and lateral (B) view, there was no residual gradient, the aortic profile was regular, there was no dissection.