

## Images in Congenital Heart Disease

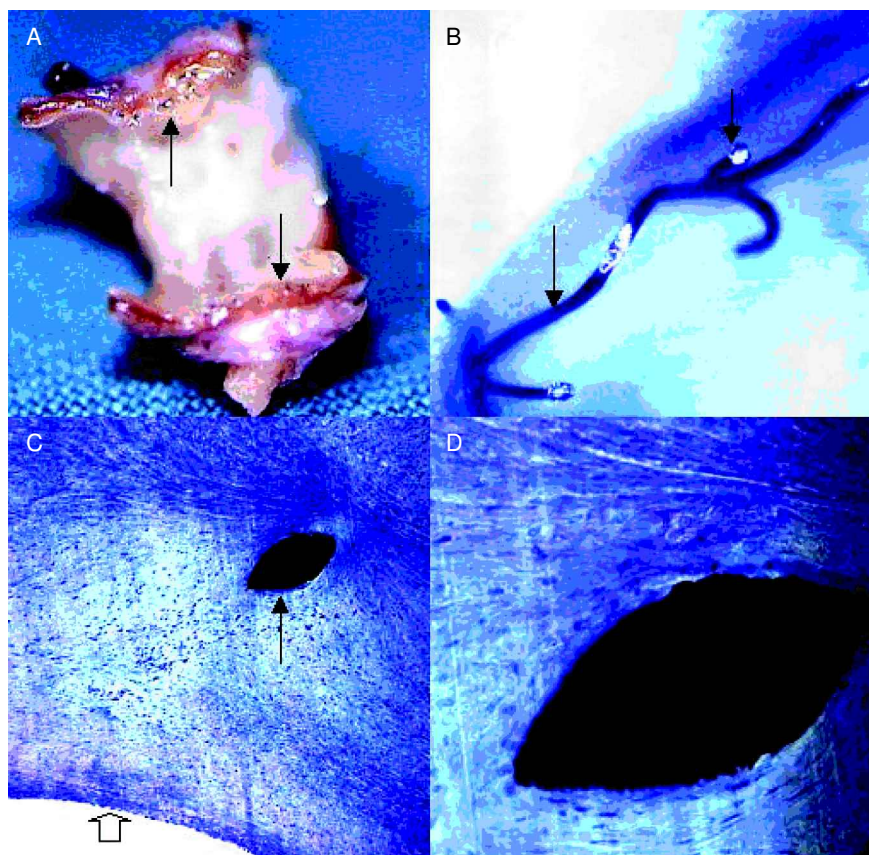
# Histology of a stented aortic segment with critical coarctation 10 months after implantation

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**R**ECENTLY, WE REPORTED SUCCESSFUL endovascular stenting as an emergency treatment of neonatal coarctation.<sup>1</sup> As a palliative therapy, a 9 mm long MAC-stent (AMG, Stuttgart,

Germany) was crimped on a 4 mm percutaneous transluminal coronary angioplasty catheter and implanted into the critical area of narrowing. Re-dilation using a 6 mm balloon catheter (Tyshak,



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PFM, Germany) was performed at 8 months of age. This led to further shortening of the stent, and facilitated its removal during elective surgery two months later, when end-to-end anastomosis was achieved having removed the stented segment. Panel A shows the removed aortic segment. The arrows point to the wire of the stent. Panel B shows the removed stented segment after dehydration and embedding in methacrylate resin (Technovit 7200, Kulzer, Germany). The typical architecture of the stent was lost due to overexpansion (the arrows indicate the wire of the stent surrounded by the blueish-tinged infiltrated

vessel wall). Microscopic examination of cutting-grinding specimens, as shown in panels C and D, demonstrated little inflammatory response around the struts of the stent (arrow in C – enlarged in D). There was, however, marked neointimal proliferation, with neo-endothelialization of the overexpanded stent (open arrow).

## Reference

1. Fink C, Peuster M, Hausdorf G. Endovascular stenting as emergency treatment of neonatal coarctation. *Cardiol Young* 2000; 10: 644–646.