

Usefulness of Andrastents for dilation of different vessels

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The authors have no financial disclosure

Introduction

- Recently new cobalt-chromium, balloon-expandable, nonpremounted stents – namely AndraStents XL and XXL (Andramed GmbH, Germany) were introduced into clinical practice.
- We have applied them from June 2009.

AndraStent XL & XXL with Hybrid Cell Design

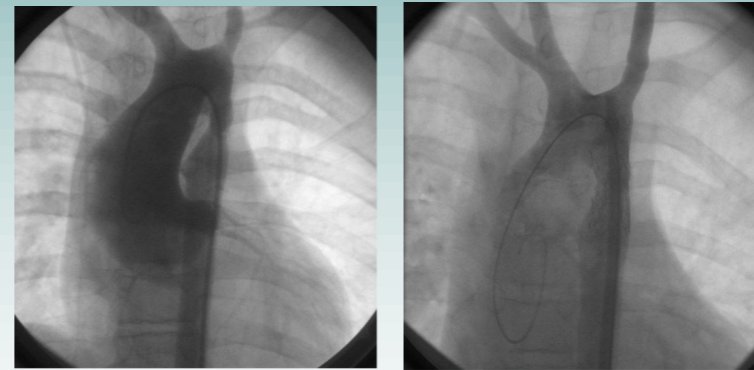
- Real Hybrid Cell design combines
 - flexibility of Open Cell Design and
 - radial strength of Closed Cell Design Stents!
- Optimal Scaffolding optimizes the clinical result!

*Hybrid Cell Design allows full flexibility pre- and post deployment!

AndraStent XL & XXL Advantages of Cobalt Chromium (CoCr) Stent Material!

- AndraStent XL & XXL (CoCr) reduces sheath compatibility
- AndraStent XL & XXL (CoCr) maximizes radial strength
- Cobalt reduces implant material

17 y old girl with bicuspid aortic valve with Turner syn. ReCoA (after end to end surgery in neonatal period).



BEFORE

AFTER AS XXL 30 implantation

RESULTS

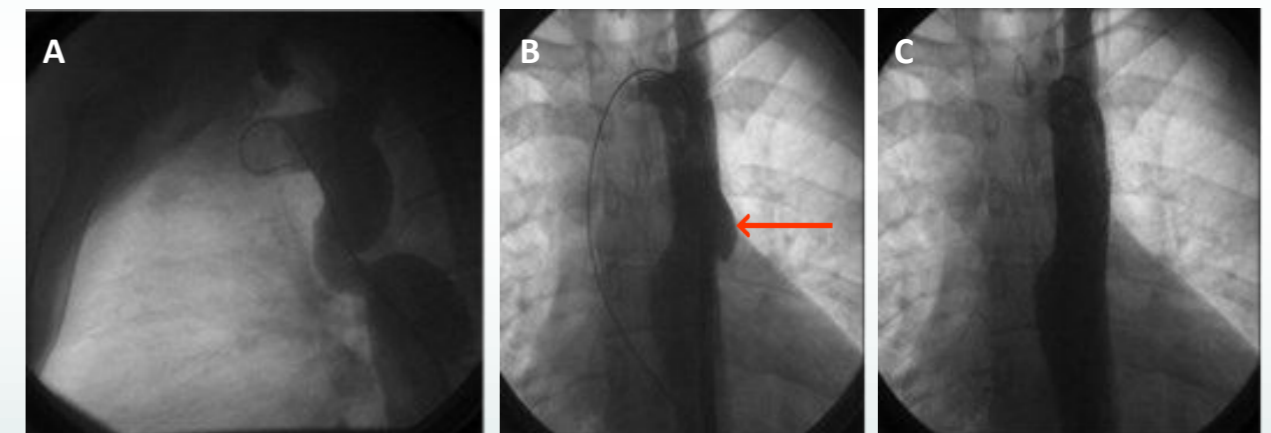
- All procedures were successful, except two.
 - 2 stent migration: 1 in RVOT in cong. absence of PV & 1 in LPA
- No fracture of the stents during procedure and in follow-up!
- Follow-up:
 - from 0,1 – 5,2 (mean 3,3) years
 - 3 pts lost from f-up

COMPLICATIONS

In 2 patients with CoA in f-up asymptomatic aneurysm formation. Both treated successfully with covered stents.

ANEURYSM - 34 years old man with CoA:

- A) Before stent implantation
- B) Six month after Andrastent implantation (aneurysm - red arrow)
- C) After covered stent implantation



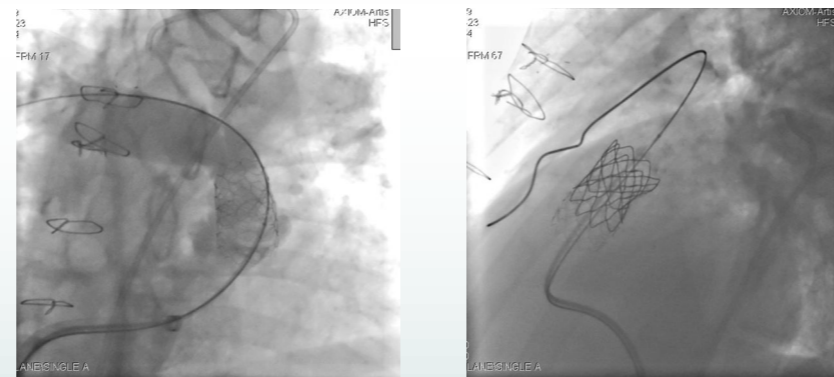
Conclusions

Andrastents XL and XXL are very good therapeutical option for the treatment of stenosed great vessels. This stents combined high biocompatibility, radial strength and flexibility without stent fractures in follow-up.

Andrastents – own experience in 91 pts

	Age (y)	No of patients
CoA / ReCoA - 46/7 pts	8-65	53
RVOT 12 calcified homograft / 7 native before PAVTI (Melody/Edwards)	11-40	19
LPA/RPA 4 cong./12 postsurg.	6-64	16
SVC iatrogenic stenosis	7,5	1
Fontan Tunel postsurgical	17	1
Stent in IAS (complex CHD)	19	1

Twenty years old man after correction of TOF with pulmonary homograft

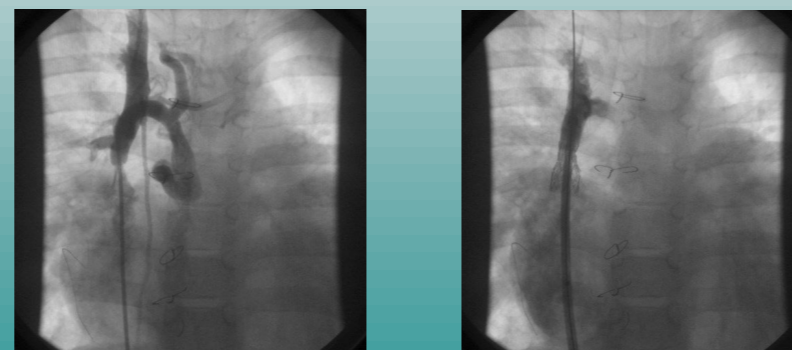


A) Prestenting of RVOT with Andrastent before planned Melody implant. (AS-39XL, balloon BIB 20 mm).

B) After Melody Valve implantation inside Andra stent

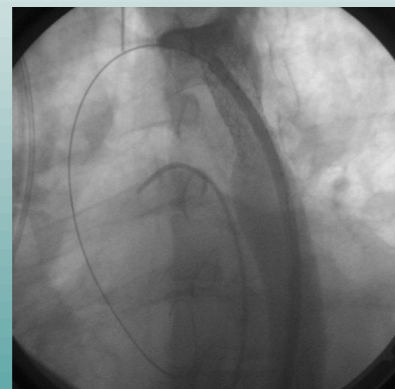
Stenosis of SVC

7,5 y old boy after double surgical correction of DORV with symptomatic iatrogenic SVC stenosis



Angiography - Before

Angiography – After AS-21XL implantation



Angio CT 4 years earlier After AS XL48 implantation

49 y old man with native CoA. At admission NYHA IV, EF 15%, sepsis, deep ulceration of the left leg, 4 cardiac arrest within 2 hours. Urgent stent (pt intubated, on high dose of adrenaline iv).

Now 5 y f-up.

Bialkowski et al. Kardiologia Polska 2011, 69, 983.

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