A Rare Case of Ascending Aortic Aneurysm in a Pediatric Patient

Analysis and Management of One Patient with Cowden Syndrome

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Presentation

- male patient at 2 year of age
- shortness of breath and failure to thrive

- severe aortic regurgitation
- heart failure

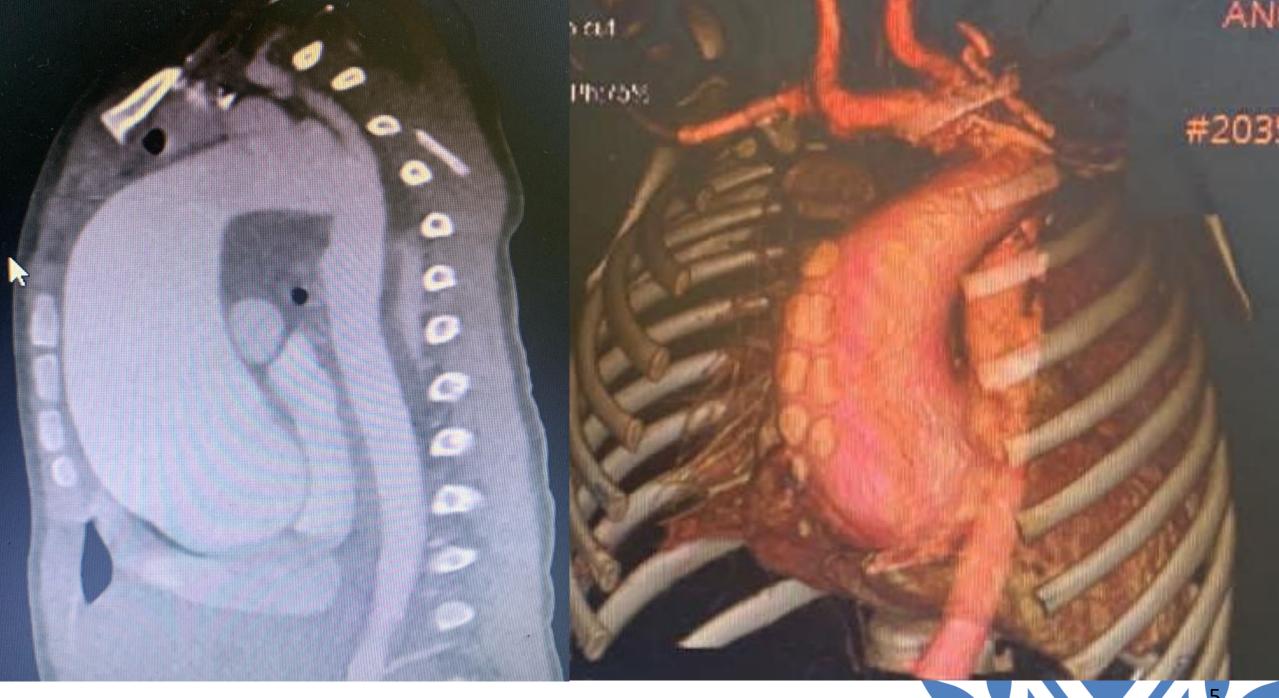


large aneurysm of the aortic root and ascending aorta

aortic valve was deemed tri-valvular

 not possible to compensate the patient and surgical intervention was recommended.





- Bentall-de Bonno operation
- biological pericardial prostheses INSPIRIS number 23 (Edwards LifeSciences), mounted on a 30 mm dacron graft
- uneventful extubated the following day

- post operative day 4 surgical re-exploration due to cardiac tamponade
- discharged home on post operative day 14
- Late follow-up at 6 months shows good surgical result.







Comments

- Cowden Syndrome, mutation on the PTEN gene (phosphatase and tensin homologue).
- PTEN mutations are related to vascular anomalies
- no literature correlated this finding with aneurysm of the aorta
- limited number of cases, not possible to draw more accurate conclusions



Conclusion

 In this particular case it was possible to implant an adult-size prostheses to ensure adequate growth to the patient

 for a future intervention bioprostheses will be replaced with a mechanical one.

