Technology of left atrial appendage closure: Cardiologist's case

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Patient history

- 76 year old male
- Chronic obstructive pulmonary disease
- Permanent atrial fibrillation
- CHA$_2$DS$_2$VASc score 4
- Recurrent severe GI bleeding due to jejunal angiodysplasia

LAA occlusion with an Amplatzer Cardiac Plug (ACP 1)
Screening TEE
Screening TEE

• Single lobe LAA
• No thrombus
• Ostium: 15x18mm
• Landing zone: 8x7mm
Implantation of an ACP 1 16mm device

Transseptal puncture
Implantation of an ACP 1 16mm device

Placement of the access sheath in the LAA
Implantation of an ACP 1 16mm device

LAA on fluoroscopy
- small additional lobe
- short neck
- landing zone 14mm
Implantation of an ACP 1 16mm device

Strawberry Shape
Implantation of an ACP 1 16mm device

Strawberry Shape
Small pericardial effusion
Implantation of an ACP 1 16mm device – Follow up

- Pericardial tamponade with RR 65/50mmHg shortly after the intervention
- Pericardial drainage of 800ml blood
Implantation of an ACP 1 16mm device – Follow up

- 1st postinterventional day again hemodynamic instability with pulsus paradoxus
Implantation of an ACP 1 16mm device – Follow up

- Sternotomy
- Evacuation of a small hematoma
- Hemostasis
Implantation of an ACP 1 16mm device – Follow up

- Bilateral pneumonia
- Right heart failure
- Sudden death 14 days after the intervention on the hospital ward
Implantation of an ACP 1 16mm device – Autopsy
Implantation of an ACP 1 16mm device – Autopsy
Implantation of an ACP 1 16mm device – Conclusions

- Implantation of an ACP 1 in a borderline small left atrial appendage with a short neck

- Complicated by pericardial effusion (Oversizing? Sheath placement?)
Thank you for your attention!

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