Successful Endovascular Abdominal Aortic Aneurysm Repair for a case with Small Diameter Aorta

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60 y/o Female
Infrarenal Abdominal Aortic Aneurysm (saccular-type)

Complication
• Hypertension
• Severe Aortic Valve Stenosis
• Steroid administration for Systemic Lupus Erythematosus
• Dialysis due to Nephrosis

History of Present Illness
7th Nov. 2010  Sudden-onset abdominal pain.
8th Nov.     Diagnosed pan-peritonitis due to perforated sigmoid colon, and emergency operation was performed.
             (preoperative CT revealed a saccular-type abdominal aortic aneurysm.)
22nd Nov.    Endovascular aneurysm repair (EVAR) was performed 2 weeks after the surgery.

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Preoperative Computed Tomography Angiogram

Lt.RA proximal neck \( \varphi 18\text{mm} \) partially thrombosed, saccular-type AAA with segmentation

Rt.CIA distal neck \( \varphi 12\text{mm} \)

terminal aorta \( 8.5 \times 19\text{mm} \)
Initial Aortogram
1. aortic extender cuff (EXCLUDER 23.0 × 33mm, GORE)

2. Two cuffs (EXCLUDER 23.0 × 33mm, GORE) were deployed on the first cuff with overlap cranially and caudally.

3. balloon touch up (MAXI LD 20.0 × 40mm, Cordis)
EVAR
Aortogram after deployment of aortic extender cuff × 3

Endoleak (+)
EVAR

1. additional deployment of aortic extender cuff (EXCLUDER 23 × 33mm, GORE)

2. bare stent (Palmaz XL 25.0 × 40mm, Cordis)
Final Aortogram
Postoperative Computed Tomography Angiogram

endoleak (-)

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Conclusion

Endovascular repair for the saccular type abdominal aortic aneurysm case with severe complication and the anatomy outside instruction for use was successfully performed without any complication.