A complex embolisation procedure using AMPLATZER vascular plugs for internal iliac artery aneurysm with anatomical difficulties due to previous history of abdominal aorta replacement surgery

Tetsuya Asato, T. Nakama, T. Takei, K. Ogata, Y. Shibata
Miyazaki Medical Association Hospital Cardiovascular Center

80s male, who have a history of history of the surgical repair of AAA. Coil embolization was conducted due to developing IIA aneurysm.

Due to the previous surgical history, conventional crossover approach from contralateral common femoral artery (CFA) was impossible. We advanced the 5Fr-Crossover dedicated sheath (CDS) into the IIA from ipsilateral CFA. DSA showed 3 branches (IGA, SGA, and ILA) (fig.2). The 5Fr-CDS was succeeded to insert into the IGA, followed by the preceding GW, MC, and 5Fr IMA type diagnostic catheter (DxC). AMPLATZER Vascular Plug (AVP) was implanted into the ostium of IGA (AVP2), SGA (AVP2) and ILA (AVP4). After the three branches embolization with AVP, coil embolization for IIA aneurysm was performed. Finally, large size AVP was implanted into proximal EIA. DSA showed complete embolization of IIA aneurysm (fig.3).

Fig. 1
Descending Aorta
left-leg of the prosthetic graft

Proximal CIA ligation
ILA
IIA aneurysm
SGA
IGA

Fig. 2
CIA
ILA
IIA aneurysm
IGA
SA
Fig. 2a
IGA
Fig. 2b
SGA
Fig. 3
AVP2
IIA packed with coil

IIA: internal iliac artery, ILA: iliolumbar artery, SGA: superior gluteal artery, IGA: inferior gluteal artery