



(A) Fluoroscopic image of the 21 mm Perimount surgical valve (arrow) in the aortic position. The arrowhead denotes the pigtail catheter in the aortic root. (B) Fluoroscopic image of the 23 mm Sapien 3 THV (black arrow) within the 21-mm Perimount surgical valve. The white arrow denotes the “waist” where the Sapien 3 THV is constrained by the sewing ring of the Perimount surgical valve. The black and white arrowheads denote the pigtail catheters in the aortic root and LV, respectively. (C) Fluoroscopic image of the 23-mm Sapien 3 THV (black arrow) within the 21-mm Perimount surgical valve. The white arrow shows that the Sapien 3 THV is now well expanded within the Perimount surgical valve. The black arrowhead denotes the pigtail catheters in the aortic root. Successful BVF was indicated by a sudden visual release of the “waist” of the THV and a rapid drop in the balloon inflation device pressure. (D) Fluoroscopic image of the 23-mm Sapien 3 THV (black arrow) within the 21-mm Perimount surgical valve. The white arrow denotes the fracture of the sewing ring of the Perimount surgical valve. (E) Fluoroscopic image showing the sewing ring (arrow) of the Mitroflow surgical valve (the rest of the valve is not visible). The arrowhead denotes the pigtail catheter in the aortic root. (F) Fluoroscopic image of the 20 mm Sapien 3 THV (black arrow) within the 19-mm Mitroflow sewing ring. The white arrow denotes the “waist” where the Sapien 3 THV is constrained by the sewing ring of the Mitroflow surgical valve. (G) Fluoroscopic image of the 20-mm Sapien 3 THV (black arrow) within the 19 mm Mitroflow surgical valve. The white arrow shows that the Sapien 3 THV is now well expanded within the Mitroflow surgical valve. The black and white arrowheads denote the pigtail catheters in the aortic root and LV, respectively. Successful BVF was indicated by a sudden visual release of the “waist” of the THV and a rapid drop in the balloon inflation device pressure. (H) Fluoroscopic image of the 20-mm Sapien 3 THV (black arrow) within the 21-mm Perimount surgical valve. The white arrow denotes the fracture of the sewing ring of the Mitroflow surgical valve. BVF: bioprosthetic valve fracture; LV: left ventricle; THV: transcatheter heart valve