Valve embolization in the left ventricular outflow tract after transcatheter valve implantation

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Figure 1: Preoperative computer tomography scan showing adequate dimensions of the iliofemoral vessels and acceptable tortuosity for a transfemoral valve implantation (A). Deployment of the first 26-mm Sapien valve resulting in a paravalvular leakage >2+ (B). Implantation of a second valve to (asterisk) to cover the leakage, as the position of the first valve (hash) was considered to be too high. Subsequent dislocation and embolization of the second valve into the left ventricle (C). Surgical view of first (hash) and the embolized valve (asterisk) after aortotomy (D). After installation of extracorporeal circulation, both the embolized (E) and the initial valves (F) were removed and a conventional aortic valve replacement was conducted.

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Transcatheter aortic valve implantation was performed on an 86-year-old male patient via transfemoral access. A second valve was needed to cover a Grade III paravalvular leakage, which resulted in embolization into the left ventricle (Supplementary Video 1). Both valves were surgically removed and a conventional bioprosthetic aortic valve replacement was conducted (Fig. 1, Supplementary Video 2).

Supplementary material (Videos 1 and 2) is available at EJCTS online.

Video 1: Dislocation of the second valve and embolization into the left ventricle.
Video 2: Surgical removal of the embolized valve on cardiopulmonary bypass and cardioplegic arrest.

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