Distortion of a transcatheter aortic valve after external chest compression

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Four years after previous transcatheter aortic valve implantation (TAVI), transapical ‘TAVI-valve-in-TAVI-valve’ procedure eliminated aortic regurgitation and reshaped the old valve distorted after external chest compression performed 6 days after primary TAVI (Figs 1 and 2). Suspected leaflet thrombus precluded balloon redilatation. Valve distortion—an adverse event

Figure 1: (A and B) Lateral and antero-posterior chest X-rays showing a distorted balloon-expandable valve (blue circles) after previous manual chest compression during cardiopulmonary resuscitation. The oval instead of circular shape of the distorted valve is clearly recognizable only on the lateral chest X-ray and not on the antero-posterior chest X-ray. (C) Regular position of the valve with no aortic regurgitation after the first transcatheter valve implantation (transfemoral). (D) A computed tomogram of the chest showing the distorted valve (arrow) anchored in the outflow tract of the left ventricle (LV). (E and F) Transoesophageal echocardiography (mid-oesophageal long-axis view) showing the distorted valve and two regurgitant jets (in green); the upper jet is paraavalvular and the lower is transvalvular. A large bracket (in red) marks the distorted valve. RA: right atrium; LA: left atrium; LV: left ventricle; Ao: ascending aorta.
of TAVI—should be taken into account before expanding indications of TAVI.

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