

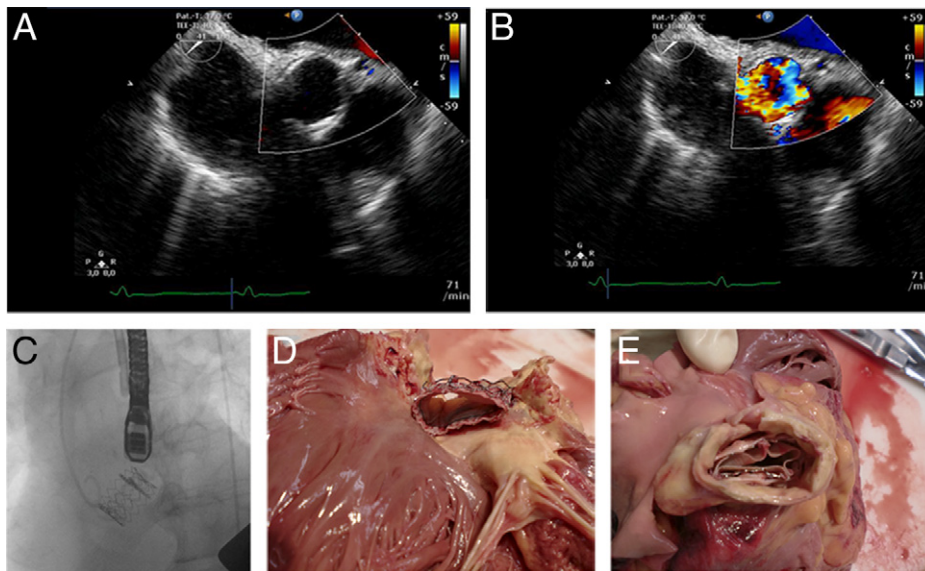
IMAGES IN CARDIOLOGY

Deformation of a Transapical Aortic Valve After Cardiopulmonary Resuscitation

A Potential Risk of Stainless Steel Stents

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We show autopsy images of a deformed Edwards Sapien XT (Edwards Lifesciences Corp., Irvine, California) valve from a patient requiring cardiopulmonary resuscitation (CPR) 5 days after uneventful transapical valve implantation. Postoperative videofluoroscopy and echocardiography show a fully expanded valve prosthesis without deformation or paravalvular leakage (**A, B, and C**, Online Video 1). On cardiac arrest, CPR was performed, but was unsuccessful. A surprising finding from the autopsy is shown in **D and E**: the valve was completely deformed.

We believe that the mechanical force was applied directly to the level where the valve was located and caused a complete valve deformation. Such a deformation would have resulted in significant valve dysfunction and paravalvular leakage. The possibility of mechanical deformation needs to be recognized and considered when performing CPR on patients with stainless steel valve implants. If CPR is successful, immediate echocardiographic control seems to be in order.