Transfemoral Transcatheter Aortic Valve Implantation using a Long Sheath for Chronic Type B Aortic Dissection: A Case Report

Masaki Tsuda[1], Yasuyuki Egami[1], Koji Yasumoto[1], Naotaka Okamoto[1], Yasuharu Matsunaga-Lee[1], Masamichi Yano[1], Masami Nishino[1], and Jun Tanouchi[1]

[1]Osaka Rosai Hospital
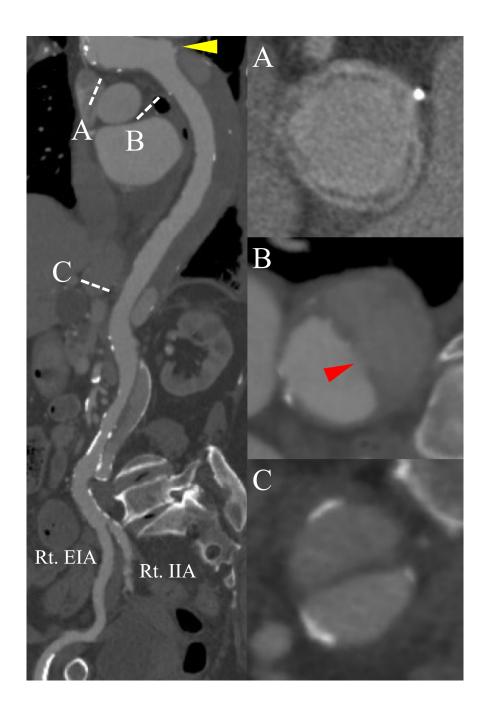
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Abstract

A 79-year-old woman with a history of open heart surgery presented with severe aortic stenosis (AS). Computed tomography (CT) showed chronic type B aortic dissection (TBAD) between the distal aortic arch and the left common iliac artery. After careful consideration, we planned transfemoral (TF)-transcatheter aortic valve implantation (TAVI) using a 20-Fr long sheath to minimize contact with the false lumen of the aorta. TAVI was performed under general anesthesia, guided by transesophageal echocardiography (TEE). A transcatheter aortic valve was successfully implanted. TEE, immediately after valve implantation, showed no remarkable changes in the descending thoracic aorta. Repeated post-procedural CT examinations showed no obvious changes in the aorta. The patient was stable without sequelae at the 12-month follow-up. This case demonstrates that TF-TAVI using a long sheath under TEE guidance can be a treatment option for patients with severe AS and chronic TBAD.
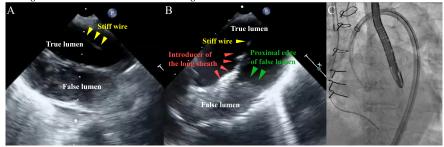
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During insertion of a stiff wire and a 20-Fr long sheath

During a sheath reinsertion   **After removal of a 20-Fr long sheath**