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Iatrogenic Subclavian Artery Pseudoaneurysm Complicating a Transradial Percutaneous Coronary Intervention

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Transradial approach has gained progressive acceptance because it has been shown to have fewer hemorrhagic and vascular-related complications than the femoral approach does for diagnostic and therapeutic percutaneous coronary artery procedures. However, transradial access is not free of complications (1). A 43-year-old man was admitted with a non–ST-segment elevation acute coronary syndrome. A transradial coronary angiography was performed, followed by a drug-eluting stent implantation in the proximal descendent artery. Twenty-four hours after the procedure, he experienced an intense, continuous chest pain in his right upper hemi-thorax that irradiated to the right forearm, without electrocardiographic changes or elevated markers of myocardial damage, and re-

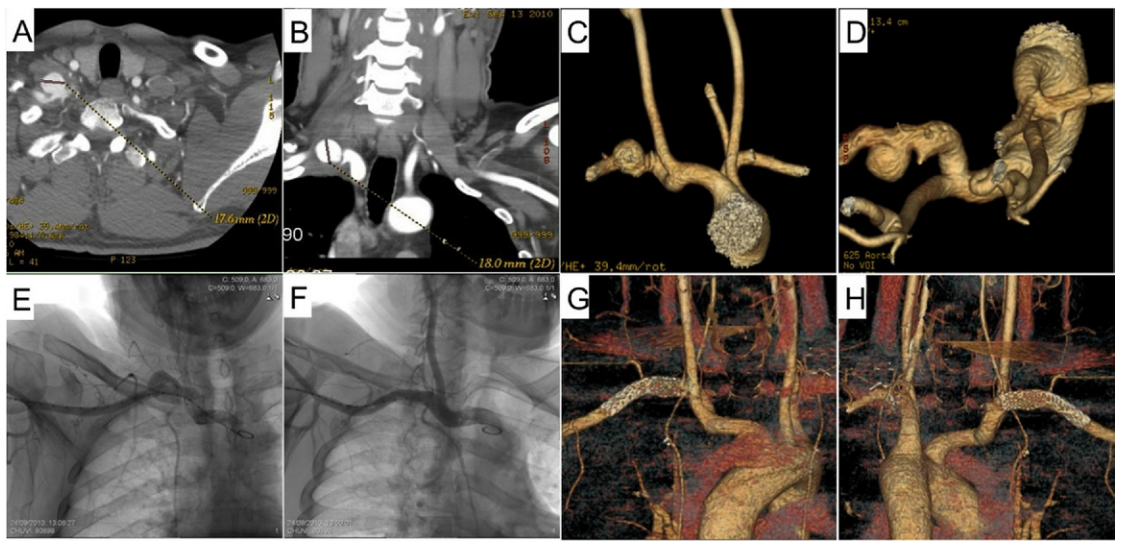

Figure 1. CT and Angiographic Images of Pseudoaneurysm

Computed tomography (CT) 2-dimensional images **(A, B)** and 3-dimensional reconstruction **(C, D)** showing the subclavian pseudoaneurysm. Angiographic images of the pseudoaneurysm before **(E)** and after **(F)** deployment of a covered self-expanding stent. Computed tomography, 3-dimensional reconstruction showing the complete exclusion of the pseudoaneurysm **(G, H)**.

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quired a high dose of analgesia. A computed tomogram was performed, revealing a subclavian artery pseudoaneurysm that compressed the brachial plexus (Figs. 1A to 1D). A few days later, an endovascular covered self-expanding stent was successfully placed, excluding the pseudoaneurysm (Figs. 1E to 1H). Chest pain disappeared, and the patient was discharged uneventfully.

Subclavian artery pseudoaneurysm is a well-described complication as an inadvertent arterial puncture following central venous catheterization (2). There are a few reported cases of subclavian artery dissection complicating mammary artery graft catheterization performed via the transfemoral approach (3), but to our knowledge, this is the first description of a subclavian pseudoaneurysm complicating a transradial artery cardiac catheterization.

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