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## TCT@ACC-i2: The Interventional Learning Pathway

**DIRECT ILIAC ARTERY PUNCTURE DURING ENDOVASCULAR PROCEDURES: ARE CONDUITS REALLY NECESSARY?**

Poster Contributions

Hall C

Sunday, March 30, 2014, 9:45 a.m.-10:30 a.m.

Session Title: Carotid and Endovascular Intervention

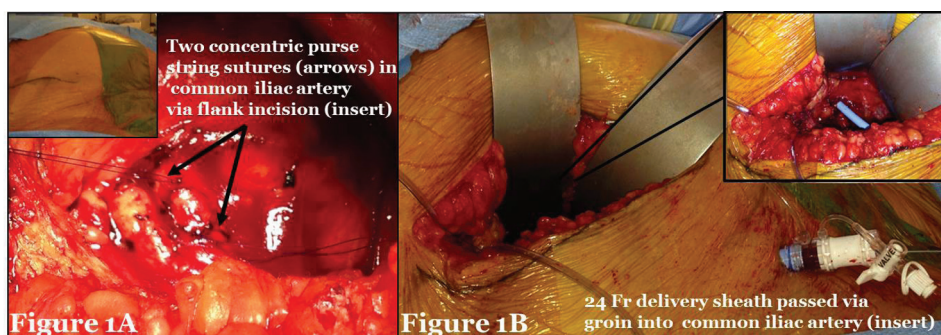
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**Background:** Transfemoral delivery of TAVR and TEVAR devices is sometimes problematic due to tortuosity or occlusive disease and alternative approaches may be limited in patients with comorbidities such as emphysema. We describe a technique in which device delivery is facilitated by direct common iliac artery puncture without an iliac graft conduit.

**Methods:** 18 patients undergoing TAVI (10) or TEVAR (8) that had inadequate femoral access and were not considered good transapical or direct aortic candidates were identified at two hospitals. All devices were delivered through a 24 French sheath inserted directly into the common iliac artery without the use of a conduit (Figure 1A). Orthogonal deployment of the device was maintained by passing the delivery sheath through the groin (Figure 1B).



**Results:** Device delivery was successfully achieved in all patients. Six TAVR patients with severe obstructive pulmonary disease, including one patient receiving TAVR in anticipation of lung transplantation, had no respiratory complications and were extubated at the conclusion of the case. One patient required re-exploration on post-operative day three for retroperitoneal bleeding unrelated to arterial puncture after beginning anticoagulation.

**Conclusions:** TAVR and TEVAR performed utilizing a direct common iliac puncture without a conduit is safe and effective when transfemoral delivery is not feasible particularly in patients with severe obstructive lung disease.