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Precise Location of Ideal Common Femoral Artery Puncture Site

The article by Toggweiler et al. (1) on vascular access with large-sheath cannulation of the common femoral artery was an excellent review for physicians performing transvascular aortic valve or endovascular aneurysm repair procedures. However, I believe their description of the ideal femoral puncture site was not good. From a clinical, interventional perspective, the ideal common femoral puncture site is between the femoral bifurcation and the inferior border of the inferior epigastric artery (2). The inferior border and the origin of the inferior epigastric artery are commonly not the

same. This is shown in Figure 1 of the paper by Toggweiler et al. (1). Punctures above the inferior sweep or lowest border of the inferior epigastric artery are commonly associated with retroperitoneal hemorrhage.

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Reply

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We thank Dr. Feldman for his interest in our paper (1). We agree with Dr. Feldman. Retroperitoneal bleeding may occur

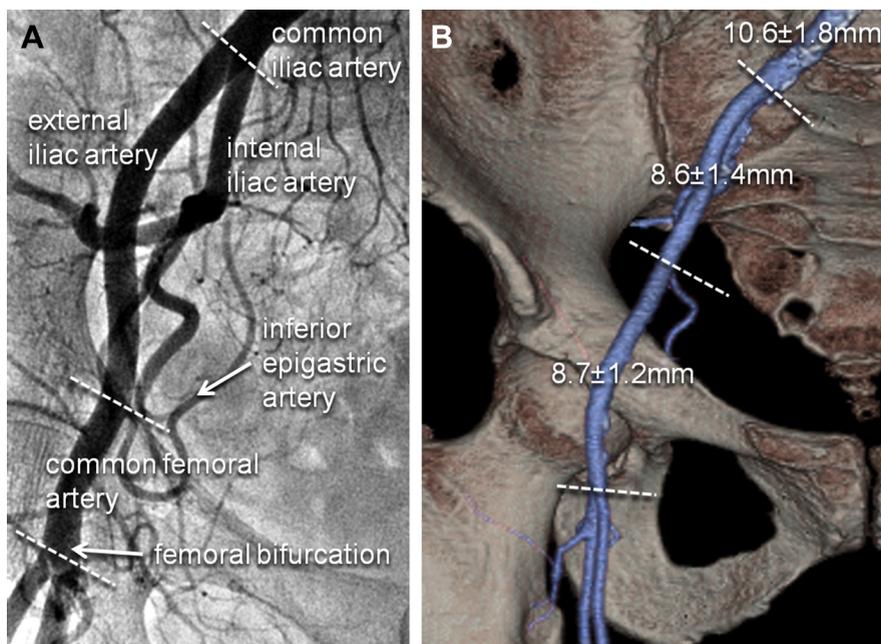


Figure 1. Basic Iliofemoral Anatomy

The external iliac artery passes under the inguinal ligament, at which point it is renamed the common femoral artery. The inferior epigastric artery arises from the external iliac artery, just above the inguinal ligament and serves as a useful landmark to demarcate the retroperitoneal space (A). The average minimal artery diameter Q5 of the common iliac artery, the external iliac artery, and the common femoral artery are shown (B).

if the puncture channel crosses the ligament, even if the actual puncture is below the origin of the inferior epigastric artery.

Therefore, we agree that the puncture site should be above the femoral bifurcation and below the inferior border of the inferior epigastric artery.

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