The Origin Variability of the Obturator Artery

Authors: Halimah Al Hifzi, Waseem Al-Talalwah, Shorok Al Dorazi, Hassan Al Mousa, Zainab Al-Hashim, Roger Soames

Abstract: The obturator artery is one branches of anterior division of the internal iliac artery. It passes on the lateral wall of pelvis to escape into thigh region via obturator foremen. Based on previous research studies, it found to be extremely variable in origin and course. It may arise from internal or external iliac artery. The current study includes 82 dissected specimens to investigate the origin of the obturator artery and explain the clinical importance. The obturator artery arises from the internal iliac artery in 75% either from its anterior or posterior division in 46.9% or 25% respectively. Further, it arises neither from the anterior nor posterior division of the internal iliac artery but it arises between them in 3.1%. In 25%, the obturator artery arises from the external iliac artery. In case of aneurysmectomy of posterior division, carries a high risk of insufficient of vascular supply for demand structures such as proximal adductors attachment and hip joint. Therefore, vascular surgeons have to pay attention to the posterior division being an origin of the obturator artery beside its usual three classical branches: superior gluteal, iliolumbar and lateral sacral arteries. Further, the obturator artery arising from the external iliac system is in great dangerous of laceration in case of anterior pelvic fracture. Therefore, it may lead to haemorrhagic shock threatening life.

Keywords: obturator artery, external iliac, internal iliac artery, anterior division, posterior division, superior gluteal, iliolumbar and lateral sacral, pubic fracture, aneurysm, shock

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