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## Is Corona Mortis, a vascular anomaly?

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**Statement of Problem:** the human arterial system is highly variable. A large number of researches on the arterial variability, including obturator artery, evidences this.

Classical manuals indicate that obturator artery is a permanent branch of the internal iliac. In the special literature, on the contrary, a large variability of the beginning of obturator artery is noted, which varies from 29% to 48% and is explained by the late development of this vessel.

The data obtained by routine dissection of pelvic vessels of newborns and adults show that the obturator artery arises from the internal iliac artery in most of cases (52%). The other sources of obturator artery are superior gluteal (18.2%), inferior gluteal (9.1%), internal pudendal (5%) and iliolumbar (2%) arteries.

Of particular interest are the variants of beginning of obturator artery from the external iliac artery system and its topography relative to the femoral ring. The obturator artery can start from external iliac (Fig. 1a) or inferior epigastric (Fig. 1b) (up to 30% according to the literature) as well as from femoral artery. The obturator artery can cross the femoral ring, bend around it along the lateral or upper medial edges.

These variants should be taken into account by surgeons during hernia surgery, when there is a possibility of damage to the artery. The beginning of obturator artery from the inferior epigastric artery is called “corona mortis”, which was found in 27.2% during our study. Some researchers note, that “corona mortis” simulates a well-developed anastomosis between the pubic branch of obturator artery and the obturator branch of inferior epigastric.

**Conclusion & Significance:** Because of variability of the obturator artery detected during the study, its topography changes also and consequently, the blood supply to a number of anatomical structures. “Corona Mortis” is seen in every third patient.

### Biography

Dzmitry Valchkevich graduated from the Medical University in Grodno (Belarus) in 2001. He has received the degree of Candidate of Medical Sciences (PhD) in 2005 for the study of 'Anatomical features of the arteries of pelvis in human' (2005). Has worked as an Assistant Professor in the Department of Human Anatomy from 2003 to 2007. Since 2007, an Associate Professor of Human Anatomy. In 2013-2015, he was the Head of the Department of Human Anatomy. During last 5 years, has about 80 scientific and educational publications, 4 manuals for students on human anatomy. The teaching interests include human anatomy, physiology and histology.

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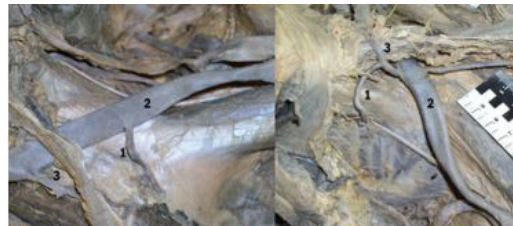


Fig: 1 - obturator artery, 2 - external iliac artery, 3 - inferior epigastric artery