

AN ANOMALOUS ORIGIN OF OBTURATOR ARTERY AND ITS CLINICAL IMPORTANCE IN HUMANS

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ABSTRACT

Background: Obturator artery is one of the medium sized parietal branches of the anterior division of internal iliac artery and it supplies the medial side of the thigh. It is the most variable vessel among the branches of the internal iliac artery. **Materials and Methods:** The present study was conducted on a total of 45 pelvic halves had been studied. The material consisted of adult subjects between the ages of forty and eighty five, from the dissection hall of department of anatomy of Alluri Sitarama Raju Academy of Medical Sciences, Eluru, and Andhra Pradesh. The findings were observed and recorded. **Results:** Origin of obturator artery was most frequently a direct branch of the anterior division of the internal iliac artery, in 16 specimens (35.55%). It was arising from the inferior epigastric artery in 12 specimens (26.66%). It arose from the common trunk of inferior gluteal and internal pudendal artery in 6 specimens (13.33%) etc. **Conclusion:** The variations in obturator artery may lead to surgical complications during pelvic surgeries requiring suturing along the pelvic brim. The anomalies affecting the arterial patterns of the limbs are based on unusual selection of channels from primary capillaries. The most appropriate channel enlarges, whilst the others retract and disappear, thereby establishing the final arterial pattern and resulting in variations in the origin. Prior knowledge of the anatomical variations may be beneficial for vascular surgeons ligating the internal iliac artery or its branches and the radiologists interpreting angiograms of the pelvic region.

KEY WORDS: OBTURATOR ARTERY; ORIGIN; VARIATIONS; INTERNAL ILIAC ARTERY.

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INTRODUCTION

Obturator artery is one of the medium sized parietal branches of the anterior division of internal iliac artery it inclines antero-inferiorly on the lateral pelvic wall and leaves the pelvic cavity by passing through the obturator foramen. It supplies the medial side of the thigh. It is the most variable vessel among the branches of the internal iliac artery¹.

The presence of organs and other anatomical structures within the closely packed confines of

the pelvis makes the study of the vascular patterns and their variations of much importance⁴. The rapid development of surgical and investigatory techniques and expertise, especially in cases involving obstetric procedures or urogenital interventions, makes it essential to understand the vascular tree in the abdomen especially in the pelvis⁵.

In 20-30% of subjects the obturator artery is