

## Case Report

# ANOMALOUS LEFT TESTICULAR ARTERY ARISING FROM LEFT ACCESSORY RENAL ARTERY AND ITS CLINICAL IMPLICATIONS

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## ABSTRACT

Origin of the Testicular Artery variations were found during routine dissection of abdomen of the middle aged cadaver in the Dept of Anatomy, Govt. Medical College Jammu. On the left side there were two renal arteries, One of them was the main Renal artery which was originating from the anterolateral aspect of abdominal aorta and running to the hilum of the kidney in front of the renal vein The other was the Accessory Renal artery which was originating from anterolateral aspect of aorta 5mm above origin of main renal artery and going to the upper pole of the kidney. The origin of accessory renal artery and main renal artery was 4.2 and 9.2mm below the level of origin of superior mesentric artery. The left testicular artery was originating from the accessory renal artery and crossing the renal artery and the renal vein anteriorly before following its usual course in the posterior abdominal wall. Only one renal artery was seen on the right side arising from the anterolateral aspect of aorta. The right testicular artery originated 52mm below the origin of right renal artery and followed its normal course This anomaly is explained by embryological development of both kidneys and gonads from intermediate mesoderm of mesonephric crest. Further the vasculature of kidneys and gonads is derived from lateral mesonephric branches of dorsal aorta .Even though the condition presents as a silent renal anomaly (Undiagnosed throughout life and revealed only on autopsy) the surgical implications are noteworthy, which too have been highlighted in this report.

**KEYWORDS:** Anomalous testicular artery; Accessory renal artery; Renal artery, Renal vein; Mesonephric crest.

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## INTRODUCTION

Renal arteries and testicular arteries arise from the lateral or anterolateral aspect of abdominal aorta. Variations relating to origin, course & number of these arteries have been reported in a number of studies. The embryological basis of these variations has also been well established. From the published studies and reports about accessory renal arteries it can be concluded that average rate of occurrence is approximately 30% Machnicki & Grzybiak examined the variation of testicular artery in fetuses and adults . According

to their site of origin from the aorta or renal arteries four main types of testicular arteries have been identified [1].

Type 1- A single testicular artery arising from the aorta.

Type 2- A single testicular artery arising from the renal artery.

Type 3-Two testicular arteries arising from the aorta and penetrating the same gonad.

Type 4- Two testicular arteries penetrating the testes. One arising from the aorta and other from the renal artery.