

BILATERAL VARIATIONS IN THE BLOOD SUPPLY OF KIDNEYS

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ABSTRACT

Classically renal arteries are a pair of lateral branches from the abdominal aorta. Each kidney is supplied by single renal artery and a single renal vein. However, current literature reports great variability in renal blood supply, the number of renal arteries and the arrangement of hilar structures on the left side. In the present paper is described a case of origin of three renal arteries found in both sides; on the right side the main renal artery and the upper branch took their origin from a common trunk coming out of the lateral aspect of the abdominal aorta, the lower branch took origin from the anterior aspect of the abdominal aorta.

On the left side the three renal arteries had separate origins from the abdominal aorta, three renal arteries give rise to 7 branches. Both kidneys found three renal veins, but in the left kidney was found three renal veins, which formed a common trunk that ran obliquely passing behind the abdominal aorta (retro – aortic) and draining into the inferior vena cava, further at the hilum was found embracing the main renal artery and the upper arterial branch. Proper knowledge of variations of the arteries supplying the kidney is essential not only to the anatomists but also to surgeons.

KEYWORDS: Anatomical Variations, Kidneys, Renal Artery, Renal Vein, Renal Hilum