ANATOMISCHE GESELLSCHAFT

1886

DAS HISTORISCHE HAUS DER ANATOMIE IN DER KÖLLIKERSTRAßE

... UND ES BLEIBT HISTORISCH IN DER JOSEF-SCHNEIDER-STRAßE

119th Annual Meeting / 35. Arbeitstagung

der Anatomischen Gesellschaft

24. bis 26. September 2025

am Institut für Anatomie und Zellbiologie

der Universität Würzburg

1886

Poster 52:

Title:
RENAL ARTERY VARIATIONS DETECTED BY CTA

Authors:
Anamarija Paunkoska (Skopje, North Macedonia)
Biljana Zafirova (Skopje, North Macedonia)
Julija Zhivadinovikj (Skopje, North Macedonia)
Niki Matveeva (Skopje, North Macedonia)
Elizabeta Chadikovska (Skopje, North Macedonia)
Ace Dodevski (Skopje, North Macedonia)
Biljana Trpkovska (Skopje, North Macedonia)
Biljana Bojadjieva-Stojanovska (Skopje, North Macedonia)
Jovana Kordoska (Skopje, North Macedonia)
anamarija@medf.ukim.edu.mk

Abstract:
This study aims to determine the prevalence and morphological characteristics of renal artery variations using computed tomography angiography (CTA) of the abdominal aorta.

A cross-sectional study was conducted on 37 CTA images of patients over 18 years of age.

The scans were performed using a multidetector CT scanner (MDCT Siemens, 128-slice), and the images were analyzed with Vitrea® Advanced Visualization Software.

Evaluated parameters included the origin, number and diameter of the renal arteries, presence of accessory arteries and the suprarenal and infrarenal segments of the aorta.

Normal bilateral renal vascularization was observed in 91.9% of cases. Variations were detected in 5.41% (2 cases): one with unilateral and one with bilateral accessory renal arteries. No statistically significant association was found between sex and the presence of variations (p=0.51).

Despite the limited sample size, renal artery variations were identified. Accessory renal arteries are a common anatomical variation with significant implications in clinical and surgical practice. Accurate preoperative identification using CTA is essential for optimal surgical planning, especially in urology and vascular surgery.