case study highlights the management and outcomes of a patient with PKD undergoing bilateral nephrectomy followed by a successful kidney transplant.

Aim of the study. To illustrate the clinical management of advanced PKD, highlighting the roles of bilateral nephrectomy and kidney transplantation in improving patient outcomes.

Materials and methods. A 60-year-old female diagnosed with PKD and liver cysts in 2004 presented in 2019 with flank pain, hypertension, fatigue, polyuria, and polydipsia. Her renal function progressively declined, with creatinine rising to 869 μmol/L and urea to 50 mmol/L by 2022. Hemoglobin dropped to 99 g/L. MRI showed extensive cystic involvement in both kidneys and liver. Hemodialysis was initiated in June 2022. To prepare for transplantation, she underwent a right nephrectomy in June 2023 and a left nephrectomy in September 2023. A cadaveric kidney transplant was performed in October 2023. Post-transplant care included immunosuppressants (mycophenolate mofetil, cyclosporine), antifungal/antibiotic prophylaxis (nystatin, co-trimoxazole, valganciclovir), and antihypertensive management.

Results and discussion. Post-transplant, creatinine decreased to 83 μmol/L and urea to 8.5 mmol/L. Hemoglobin and red blood cell counts stabilized, improving the patient's energy and reducing PKD-related symptoms. PKD is the leading genetic cause of ESRD, with bilateral nephrectomy and transplantation being the most effective treatments, as drugs like tolvaptan only slow cyst growth without curing the disease. This case emphasizes the importance of multidisciplinary care, involving nephrologists, transplant surgeons, and internal medicine specialists. Post-transplant management, including immunosuppression, infection control, and lifestyle modifications, is vital for long-term success.

Conclusion. This case highlights the complexities in managing advanced PKD, emphasizing the necessity for bilateral nephrectomy and timely kidney transplantation in ESRD patients. Post-transplant care, including immunosuppressive therapy and lifestyle modifications, plays a critical role in maintaining graft health and preventing complications. The patient's successful recovery post-transplant demonstrates the effectiveness of a multidisciplinary approach in managing PKD-related ESRD.

ABNORMAL ANATOMICAL VARIANT OF RENAL VEIN

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Introduction. Circumaortic left renal vein (CLRV) is an anomaly of left renal vein when an accessory left renal vein passes posterior to the aorta, along with normal renal vein passing anterior to the aorta. According to the previous

studies, the prevalence of circumaortic left renal vein has been reported to be between the range of 1% to over 15%. Mostly, it remains clinically silent until it gets discovered accidentally during an operation or imaging. In most cases of circumaortic left renal vein, compression of the the pre-aortic left renal vein between the superior mesenteric artery and the aorta occurs, which is termed as the nutcracker phenomenon. In addition, left renal vein fenestrations are seen rarely since vascular fenestrations are mostly seen in the arterial system and cerebral vessels.

Aim of the study. The article aims to highlight a rare case of an anomaly of left renal vein (circumaortic left renal vein with a fenestration associated with nutcracker phenomenon) and the importance of being familiar with such congenital anomalies as a possible cause for symptoms such as hematuria.

Materials and methods. We present to you, a case of circumaortic left renal vein with a renal vein fenestration, along with anterior nutcracker phenomenon which lead to macroscopic hematuria as a complication of the anomaly.

Results and discussion. A 31-year-old female presented herself for a consultation to the Department of Nephrology with complaints of macroscopic hematuria. She noticed her urine being in dark brown color 5 times within the past 1 year. She first consulted a urologist who initially diagnosed her with acute cystitis, after finding increased erythrocytes in her urine analysis. The Urologist assumed that it could be due to an infection she had and gave antibiotic therapy. However, the treatment did not improve her symptom. Hence, she visited the department of Nephrology to do further tests and get treatment. The patient demonstrated normal, painless urine output with sufficient diuresis and absence of edema. Urine analysis according to Nechiporenko revealed normal findings. Biochemical blood tests showed increase in creatinine level (107 mcmol/L) and GFR (60 ml/min/1,73m^2). Kidney Ureter Bladder (KUB) ultrasound showed normal findings. Finally, a Computed Tomography (CT) scan of abdominal organs was performed with intravenous contrast, which revealed circumaortic left renal vein with aorto-mesenteric compression by the superior renal vein (Nutcracker phenomenon), with fenestrated inferior renal vein. The patient was advised to be under observation of a physician, to be in compliance with correct water-salt regime, to avoid environments with cold temperature and strenuous physical activity. Before being discharged, the patient was advised to do ultrasound once in every 6 months.

Conclusion. In case of clinical symptoms such as hematuria, it is important to consider venous variations such as circumaortic left renal vein and have a high index of suspicion for it, to increase its detectability and to prevent possible iatrogenic injury during surgical procedures and interventions.