

## **Malakoplakia as a cause of chronic kidney disease: a case report**

Julia Piel, Teesi Sepp

Malakoplakia is a chronic multisystem granulomatous inflammatory disease characterized by the presence of single or multiple soft plaques on various organs of the body, typically affects the urinary tract.

The case presents a 39-year-old man who was first admitted to the nephrology department in December of 2020 due to extensive kidney damage and uroinfection. In the patient's medical history it was stated that during childhood he was diagnosed with a left-sided megaureter and a right-sided atrophic kidney, and was operated at age of 10 (Cohen procedure).

Considering the medical history and clinical findings (bilateral hydronephrosis and megaureters on ultrasound examination), the kidney damage was considered chronic, therefore hemodialysis treatment was started. Due to non-healing uroinfection, it was decided to perform a bilateral nephrostomy. Normal urine output was present from the left kidney but from the right side only pus excretion was observed. The patient was diagnosed with microcystitis, non-functioning left kidney, stricture of the anastomosis resulting from childhood neocystostomy and consequent hydroureteronephrosis. After nephrostomy, inflammation subsided and kidney function improved. Subsequently hemodialysis treatment was discontinued and he was admitted to outpatient treatment with nephrostomy tubes.

In 2021 the patient underwent nephrectomy and left ureter reimplantation with bladder augmentation. Preoperatively, and during surgery repeatedly examined for tuberculosis, all tests returned negative. Histological examination of the bladder, ureters and right kidney provided evidence of malakoplakia.

After the operation, the patient required hospital treatment four times (one time due to the structure of the anastomosis of the left ureter, the remaining times due to the uroinfection and the worsening of the kidney function), and from 01.09.2021 the patient is on chronic hemodialysis treatment.

Given the urological history and the risk of infection, the patient is not a candidate for kidney transplantation.