

Sigmoidal Adenocarcinoma as a Late Complication of Ureterosigmoidostomy

Authors:

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Case Summary

Mr A. - 45 years old, underwent ureterosigmoidostomy as a newborn whereby both ureters were connected to the sigmoid colon. At the time of admittance, he was found to have urostasis. Further investigations showed late-stage adenocarcinoma at the site of the uretero-sigmoid stoma causing outflow obstruction.

Chronology Until Hospitalisation

Mr. A was born with bladder extrophy that required removal of the urinary bladder at the age of 4 months. To preserve the integrity of the urinary system, ureterosigmoidostomy was performed. Years later, the patient suffered from a severe episode of acute pyelonephritis at age 20 that led to the removal of the left kidney.

In spring 2017, the patient started to complain of bloody stools. This was first attributed to haemorrhoidal disease. However, the persistent clinical picture led to an MRI scan in autumn that showed ureteric distention of the remaining right ureter. Shortly after, Mr. A presented to the Emergency Department of Pauls Stradiņš Clinical University Hospital

Clinics

Mr. A arrived at the hospital with complaints of weakness, fatigue, nausea and acute abdominal pain.

Anamnesis, abdominal ultrasound and blood biochemistry confirmed right-sided hydronephrosis (*some laboratory values at that time are shown in the table on the top right*).

Complicated by Mr. A's medical history, the presentation of acute renal failure warranted immediate haemodialysis with central venous catheterisation followed by percutaneous nephrostomy to bypass the outflow obstruction and protect renal function.

Once Mr. A's state stabilised, he underwent colonoscopy which revealed a large sigmoidal tumour at the site of the stoma leading to outflow obstruction.

Patient Approach

Consequentially, Mr. A was scheduled for laparotomy with sigmoidal resection and onco-pathological evaluation. During the procedure, the sigmoid colon including the site of the stoma and the distal part of the right ureter were removed. Additionally, an ileal conduit urinary diversion was created to ensure urinary functionality.

The pathological evaluation of the sigmoid tumour showed a poorly differentiated (G3) mucinous adenocarcinoma. TNM-staging was stated as pT4m N2b M- G3 R1.

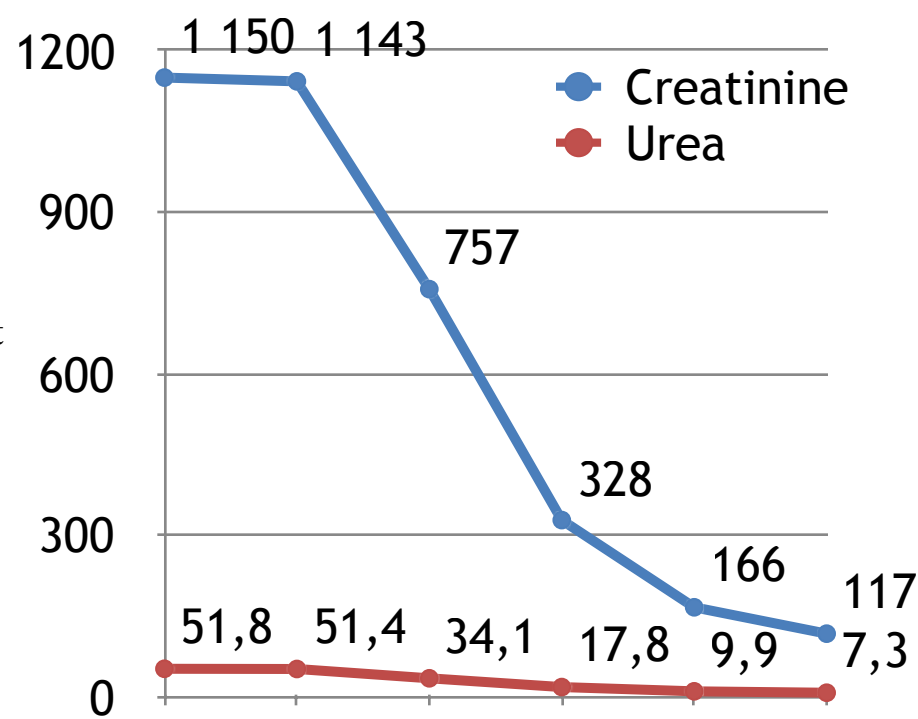
Mr. A was referred to oncological and palliative care.

Comments

The patient suffered from the two most common complications of ureterosigmoidostomy, kidney injury and aggressive malignancy. Due to that the procedure is nowadays rarely performed in first world countries. However, immigrants from poorer nations and older patients who have undergone this procedure may still be alive and thus, attention should be paid towards detecting these grave sequelae.

Biochemical investigation at admission

Haemoglobin	9,8 g/dL
Creatinine	1150 µmol/L
Urea	51,8 mmol/L
C-reactive protein	14,5 mg/l
Glucose	7,4 mmol/L



Above: The chart shows the serum creatinine and urea values at admission and following treatment for acute renal failure.



Above: The abdominal CT image shows the patient's status after nephrostomy was performed to relieve urostasis in the right renal pelvis. The coronal view shows the uretero-sigmoid stoma with proximal ureteric distention. The location of the tumour is marked with an asterisk (*) The left kidney and ureter were removed.