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P426 -Malakoplakia in a renal transplant

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Malakoplakia is a rare chronic granulomatous disease that typically occurs in the context of recurrent infections, particularly in association with immunosuppression. It usually involves the urinary tract, but has also been reported in other organs as well as occasionally in solid organ transplants. Macroscopically, it can form masses and the diagnosis is based on characteristic histological features. When it occurs in renal transplant recipients, it can contribute to loss of graft function. The most frequently isolated microorganism is *E. coli*. Treatment of renal transplant malakoplakia involves reduction in immunosuppression and prolonged antibiotic therapy. Refractory cases may require allograft nephrectomy.

We present the case of a 70 year old man of Nigerian origin with end-stage renal failure secondary to hypertension who received his second renal transplant in 2014. His past medical history included type 2 diabetes and atrial fibrillation. His maintenance immunosuppression consisted of tacrolimus and prednisolone. The patient had a history of recurrent *E. coli* urinary tract infections. An ultrasound of his left iliac fossa renal transplant due to worsening graft function demonstrated three discrete cortical lesions, renal hydronephrosis and an extrarenal soft tissue mass medial to the transplant kidney and anterior to the bladder (5 x 8 x 6 cm). A biopsy of the pelvic mass demonstrated von Hansemann cells and Michaelis-Gutmann bodies, pathognomonic of malakoplakia. There was no evidence of malignancy. The culture of the biopsied tissue showed a heavy growth of *E. coli*. He was treated with an eight week course of oral cefuroxime based on sensitivities, in order to eradicate the infection.

Over the following two months, the patient had a marked deterioration and became dialysis dependent. A CT scan demonstrated progression of the malakoplakia which had extended to involve the peritoneum surrounding the graft, the bladder wall, rectus abdominis muscle and subcutaneous tissues. A repeat biopsy of the pelvic mass was again consistent with malakoplakia and grew *E. coli*; TB and fungal cultures were negative. He was admitted to hospital following a fall as a result of his general decline. After discussion, he was commenced on a 3 month course of fosfomycin three times a week post haemodialysis and immunosuppression was further reduced. He was not suitable for surgical resection due to the extent of the disease. Unfortunately, he died following a stroke six weeks after starting treatment with fosfomycin.

This case report highlights a rare but serious complication of immunosuppression in renal transplant recipients.