Cutaneous malakoplakia in a kidney transplant recipient: A case report

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Abstract

Malakoplakia is a very rare granulomatous condition resulting from defective lysosomal clearance of intracellular bacteria by macrophages. Cutaneous malakoplakia is considerably rarer. As reported it is far more prevalent in immunocompromised patients and it can affect many organs but is more common in the urogenital tract.

We report a case of cutaneous malakoplakia in a kidney transplant patient who had buttock lesion clinically suspicious for necrobiosis lipoidica diabeticorum, and initially thought to be possible cutaneous cryptococcosis on histology, but pathologically proven to be malakoplakia.
Case: A 56-year-old male with end-stage kidney disease due to malignant hypertension. He had been on haemodialysis since 09/2016. He received a DCD-transplant in 11/2021 at our institution which was complicated with delayed graft function due to ATN. His maintenance immunosuppression included tacrolimus 5mg bd with trough levels maintained in the therapeutic range, Azathioprine 125mg daily, and prednisone 5mg daily. Baseline creatinine was stable at around 140 µmol/L.

The patient presented to the transplant clinic with (Left) buttock lesion extending to the anus, no skin pus or abscess that looked drainable. Vitals at the clinic were within normal limits and systemic physical examination was unremarkable. The wound was cleaned and dressed at the clinic. Despite care and dressing the patient came back to the clinic after 2 weeks with the lesion worsening. Initially, the surgeons queried necrobiosis lipoidica diabeticorum. Skin biopsy was done. The provisional skin biopsy findings were thought to be compatible with cryptococosis. After further histochemical staining, PAS stain showed positive-staining in what was described as Michealis-Gutmann-bodies, and the Von-Kossa stain showed Calcium phosphate in these M-G-bodies. Histopathological findings confirmed the diagnosis of malakoplakia. The patient was treated with long-term trimethoprim/sulfamethoxazole and his Azathioprine was stopped. He has improved with antibiotic therapy and is currently following up in the transplant clinic.