A 42-year-old female patient, who underwent commercial living unrelated kidney transplant of unknown donor status for end stage renal disease two weeks prior to presentation, was admitted for acute renal failure and rejection. Ultrasound of transplanted kidney showed hydronephrosis and absent blood flow. She underwent nephrectomy of the transplanted kidney with intraoperative findings of extensive necrosis of the kidney, subcutaneous tissue and muscle fascia. The donor renal artery was anastomosed to the internal iliac artery which was ligated and the donor renal vein was anastomosed to the external iliac vein. There was gross infection of the native iliac vessels. Kidney pathology showed hyphal elements and culture was positive for Aspergillus (Figure 1). Liposomal amphotericin and voriconazole were started. Unfortunately, she developed right lower extremity ischemia due to septic embolus from the iliac artery requiring emergency revascularisation with stent placement and decompression fasciotomy. The skin was found to have fungal abscesses and the subcutaneous fat was cheesy grey consistent with fat saponification (Figure 2). The clinical picture consisted with systemic endovascular invasive aspergillosis. Despite multiple surgical debridements of the wounds, source control could not be achieved in view of extensive involvement and progression of necrosis and infection. Aspergillus is an environmental mold that was likely present at the original transplant operation. While secondary exposure and infection are possible, it is unlikely given the magnitude of the infection on presentation. The prevalence of invasive aspergillosis in renal transplant recipients ranges from 0.7% to 4% with mortality rate from 65% to 92% [1,2,3].

References

