

Indolent necrotic transplant kidney hematoma disguised as a renal tumor

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Kidney transplant recipients are at increased risk of developing renal carcinoma both in the remaining native kidney and the transplanted kidney when they have undergone prolonged periods of dialysis. Radiographically, kidney masses can be categorized by the shape, either 'ball type' or 'bean type'. The possibility of malignancy should be considered in both types although renal tumors are rare in transplanted kidneys. A 50-year-old man visited our clinic because of a palpable mass at the right lower quadrant of his abdomen. He felt that his allograft was expanding over the past six months. However, no pain was associated. Thirty-five years earlier, he was diagnosed to have end stage kidney disease due to chronic glomerulonephritis and began to undergo hemodialysis. One year later, he received an allograft kidney from his father but had to return to dialysis therapy in a year. Since his five years' peritoneal dialysis period, he has undergone hemodialysis for 27 years until now. On physical examination, his blood pressure, pulse rate, and temperature were within the normal ranges. Hemoglobin was 11.4 g/dL, platelet count 227,000/mm³, blood urea nitrogen 58.3 mg/dL, and serum creatinine 9.35 mg/dL. Computed tomography of the abdomen revealed that the transplanted kidney had increased in size compared to the previous images, suggestive of an indolent renal tumor. The mass has a widespread low density internal lesion and multiple calcifications (Fig. 1A). For the pathological diagnosis and treatment, the transplanted kidney was totally removed. On gross examination, the allograft kidney was measured approximately 12 cm and consists of a totally necrotic nodule without normal anatomical structures (Fig. 1B). Microscopically, organizing hematoma and dystrophic calcification were present, and no viable kidney cells were identified (Fig. 1C). We describe a case of indolent necrotic transplant kidney hematoma disguised as a renal tumor. To the best of our knowledge, no similar cases were reported from kidney transplant recipients. We postulate that the allograft kidney might undergo repeated episodes of hemorrhagic infarction during the course of chronic rejection.

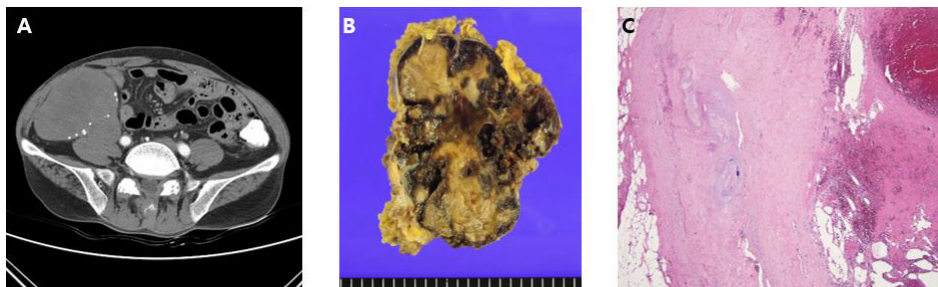


Figure 1. Abdomen CT revealed that the transplanted kidney had increased in size compared to the previous images, suggestive of an indolent renal tumor (A). On gross examination, the allograft kidney consists of a totally necrotic nodule without normal anatomical structures (B). Microscopically, organizing hematoma and dystrophic calcification were present, and no viable kidney cells were identified (H&E, x40) (C).