Spontaneous subcapsular haematoma: a rare cause of acute kidney graft dysfunction

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DESCRIPTION

A 39-year-old patient who had kidney transplant presented at the emergency department with pain in his right flank that was ongoing for 15 days. It had started suddenly when he was driving his taxi, after a coughing effort. No haematuria and no history of trauma.

He had had a deceased donor kidney transplant 10 years before, put in his right flank. Histocompatibilities were: 1 DR and 2 AB, PRA was 0%. He had delayed thrombosis of his renal artery diagnosed intraoperatively and had thromboembolectomy immediately. He also had delayed graft function and maintained slight chronic graft dysfunction (sCr 221 µmol/L). He was not on any blood thinners. His initial immunosuppression was ciclosporin, mycophenolate mophetil and prednisolone, but ciclosporin had been removed in 2008 by a previous attending nephrologist. He had never had a kidney biopsy.

He was haemodynamically stable and there was a palpable painful mass in his right flank. Ultrasonography showed a 15cm suspicious solid mass in his kidney transplant. Suspicion was high for neoplasia. His blood film showed sCr 318 µmol/L and platelets 220 000 /µL. Coagulation profile was unremarkable (PT 12.5s, INR 1.09). His evolution was with progressive kidney dysfunction and oligoanuria, so he started haemodialysis, without heparinisation, on day 2 of admission. He maintained need for haemodialysis support for 1 week. His baseline immunosuppression

Figure 2 The image on CT urogram represents an haematoma with well-defined margins (orange arrow).

was kept. After 1 week, he recovered kidney function, so a kidney biopsy was not performed. His last serum Cr was 212 µmol/L.

On angio-CT a 16cm diameter haematoma was diagnosed, with no evidence of active haemorrhage (figures 1 and 2). As the haematoma was stable, the decision was not to perform surgical exploration. Instead, the indication was for bed rest, and a control CT showed regression of the dimensions of the haematoma (figure 3).

This is a surprising case, as suspicion was initially high for a neoplasia. As these patients are subjected to a

Figure 1 CT urogram shows a 16 cm solid mass surrounding the kidney allograft (orange arrow).

Figure 3 A control CT showed regression of the haematoma (orange arrow).

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Learning points

- Most late complications postkidney transplant are due to either allograft failure or secondary effects of long-term immunosuppressive medication on the receptor (cardiovascular disease, infection, malignancy).¹ However, we must keep our minds open to the hypothesis of other not-so-frequent causes of graft dysfunction.
- This is a rare complication in the late postkidney transplant period. This patient was not on any blood thinners and also was not taking any antiaggregant, he had no thrombocytopenia and still had a spontaneous subcapsular haemorrhage. As was noted, he only had a history of a spontaneous thrombus at the time of transplant.
- A thorough workup and expeditious imaging study are invaluable resources to help distinguish this entity from other more frequent causes of graft dysfunction.

high degree of immunosuppression, they are more likely to develop atypical infections or tumours. The actual diagnosis turned out to be a rare complication in the late postkidney transplant period.

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REFERENCE

- 1 Danovitch GM. *Handbook of Kidney Transplantation (sixth edition)*: Wolters Kluwer, 2017.

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