

Complete remission of visceral and cutaneous Kaposi's sarcoma after liver-kidney transplantation

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CASE

A 46 year old male with first liver transplantation and second kidney transplantation on the 4th March 2001 with HCV and HBV positive serology, developed back and abdominal pain, weight loss and weakness in August 2001. Physical examination revealed poor general status, pleural effusion, hepatosplenomegaly, ascitis and a 5 mm red nodular lesion in the abdominal skin. Immunosuppressive regimen was thymoglobulin P, MMF and Tacrolimus (FK-506).

Thorax-abdominal CT scan revealed multiple hypodense areas in the liver (Figure 1). Liver and skin biopses showed the same histological image: spindle-shaped tumor cells surrounding hyperemic vascular slits in association with extravasated erythrocytes, hemosiderin and fibrosis (Figures 2 and 3). Immunostaining for CD31, CD34 and Factor VIII were positive. HHV-8-DNA-PCR in liver and skin biopses were positive and diagnoses of Kaposi's sarcoma was done. It was decided to interrupt MMF ad-

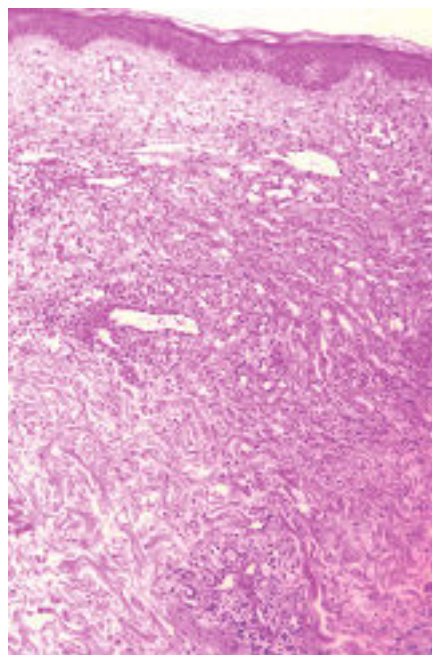


Figure 2. Kaposi's sarcoma, skin biopsy. HE 100X.



Figure 1. Evolution of liver CT scan. A. Multiple confluent hypodense areas in the liver (August 2001). B. The hypodense areas in the liver became smaller (October 2001). C. Significant reduction of liver lesions (November 2001).

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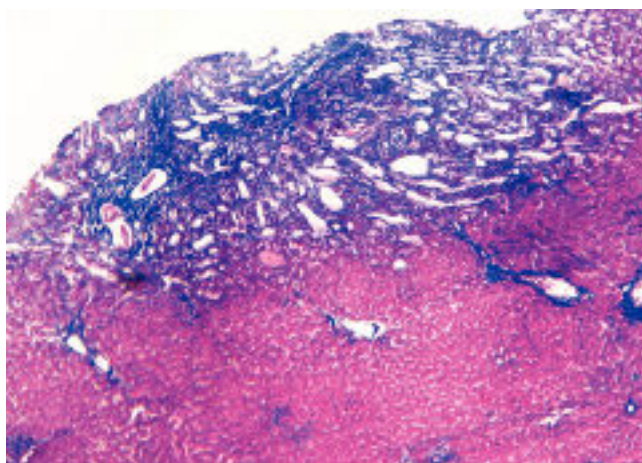


Figure 3. Kaposi's sarcoma, liver biopsy. HE 40X.

ministration on 24th August 2001 and FK-506 on 10th September 2001. In March 2002 symptoms had a steady and complete remission, peripheral blood cells count became normal and stable, the immune status became stronger, skin lesion was resected without appearance of recidivism and liver lesions significantly reduced. As a second treatment, the patient received liposomal daunorubicin and liver lesions reduced progressively, while liver and kidney function remained stable with prednisone monotherapy. Kidney transplant complications caused the death of the patient in 2008 without recurrence signs of sarcomatous lesion.

DISCUSSION

Kaposi's sarcoma with visceral involvement has been described as an aggressive disease with a poor

prognosis in transplanted patients.¹ The graft may be affected in most cases although the skin must not necessarily be involved. Although the most appropriate therapeutic approach had been controversial, immunosuppression reduction or sirolimus switch is mandatory and can induce complete regression.^{2,3} A case with cutaneous and visceral Kaposi's sarcoma after liver transplantation successfully treated with cidofovir and liposomal daunorubicin has been reported.⁴

In our transplanted patient, the reduction in the immunosuppressive regimen and a second treatment with liposomal daunorubicin led to a complete remission of cutaneous and visceral Kaposi's sarcoma, without recurrences during a 6-year follow-up. The present is the first case, to our knowledge, of visceral Kaposi's sarcoma that responds completely to this treatment.

The existence of a specific antiviral drug would lead us to a better management of HHV-8 symptomatic infection and Kaposi's sarcoma development as well as help us in HHV-8 prevention.

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