MISDIAGNOSED MALIGNANCY IN TRANSPLANTED ORGANS.

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Organ transplantation has become the treatment of choice for a growing number of terminally ill patients. The increase number of procedures increase the number of complications related to transplantation and to the immunosuppression. We report our experience in the transferral of malignancy by grafting cancerous organs into recipients, which is a rare but desastrous complication of transplantation.

CASE REPORTS

Donor 1 was a 30-year-old female died from nontraumatic cerebral hemorrhage. A multiorgan harvest was performed, and the liver and the left kidney were explanted and transplanted to recipient 1 and 2, respectively. The right kidney was rejected for vascular and urological abnormalities. Necropsy revealed a nodule in the right kidney, and three hemorrhagic nodules in the right lung. Histopathological analysis of these nodules demonstrated the presence of a choriocarcinoma. Later serum analyses revealed very high levels of ß-HCG.

Recipient 1 was a-20-year-old female who received the left kidney from donor 1. Graft CT-scan demonstrated a 2-cm nodule, and the immunosuppression was interrupted. Transplantectomy was performed on postoperative day 12 but ß-HCG levels rose. A chemotherapy was undergone, which succeeded in normalizing the ß-HCG level. Two years later, the patient was retransplanted and since then shows no evidence of recurrence.

Recipient 2 received the liver from donor 1. His ß-HCG levels rose despite normal graft CT scan. The patient died on day 39 from pulmonary complications, and autopsy showed 3 choriocarcinoma metastasis in the hepatic graft.

Donor 2 was a-35-years-old female died from a nontraumatic cerebral hemorrhage. Paraaortic adenopathy was noticed during multiorgan harvesting. The liver, the heart and the kidneys were transplanted in 4 different centers. The results of the histopathological examination showed that the paraaortic and pulmonary nodes were positive for a disseminated epidermoid epithelioma, originating from the cervix uteri.

Recipient 3 was a 25-year-old man who received the liver from donor 2 in our department. The patient was retransplanted on postoperative day 7 and no evidence of malignancy was detected on histopathological analysis examination on the graft.

Donor 3 was a 55-year-old female who died from cerebral hemorrhage in another country. We received one kidney, and we found a 4-cm nodule in this organ. Frozen section of this lesion showed a renal adenocarcinoma and transplantation was aborted in our center and in the centers which received the other kidney and the heart from the same donor.

DISCUSSION

As these cases demonstrate, the transferral of malignancy with organ transplantation may rarely but dramatically complicate the postoperative outcome of recipients. Its medical management is difficult, and its psychological impacts on the recipients may be desastrous. The transplant centers, both small and large, must be prepared for such an eventuality. Due to the organ shortage, the transplant teams enlarge the indications of harvesting, accepting older donors for instance, but the "malignant" donors must be avoided. The use of donors with previously successfully treated cancer should be totally excluted, excepted the primary supratentorial cerebral tumors. However, as in our cases, the donor's cancer is often non diagnosed. Careful examination of the abdomen and the thorax must be performed during the harvesting, and histopathological analysis of suspected nodules must be available before the transplantation. Peroperative echography and postharvesting autopsy may be helpful. If a recipient was transplanted with a kidney harvested from a cancerous patient, the immunosuppression must be discontinued and the graft must be explanted. Specific chemotherapy must be initiated if primary tumor is proven sensitive to treatment. Hepatic allografts are not immediately expandable, and they must remain in situ until another graft is available.