ACUTE LIVER FAILURE ASSOCIATED WITH ANTIRETROVIRAL TREATMENT FOR HIV – IS THERE A ROLE FOR LIVER TRANSPLANTATION?

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Introduction Combination antiretroviral medication has dramatically improved the prognosis of HIV infected individuals. Hepatotoxicity is an adverse event that can lead to interruption of therapy, clinical hepatitis and death. HIV was previously a contraindication to liver transplantation but it has now been shown that HIV+ve patients, without HCV co-infection, do equally well following transplantation for chronic liver failure. The authors report on the management, complications and outcome of 6 patients that presented with acute liver failure secondary to antiretroviral therapy.

Methods All patients presenting to a single site hospital with acute liver failure secondary to antiretroviral therapy from June 2007 to June 2010 were included. Data collected included demographics, blood results, morbidity, mortality and outcome.

Results 6 HIV+ve patients, on antiretroviral medication for a median 29 months (range 1–70), were admitted. The median age was 38 years (range 35–43). 4 were female. All patients were encephalopathic, had a raised bilirubin (range 160–585 μmol/l, median 404), raised ALT (range 298–1645 IU/l, median 642) and prolonged PT (range 25–265 s, median 46.5). All 6 patients had necrosis on biopsy or explanted liver. All patients were on NNRTI based HAART, 4 on nevirapine and 2 on efavirenz. The antiretroviral regime was discontinued in each case. Of the 6 patients, 4 had a liver transplant. All transplanted patients had postoperative complications. 3 had episodes of acute rejection requiring pulsed methylprednisolone, 1 developed an anastomotic bile leak requiring ERCP and stenting, 2 developed post-transplant diabetes requiring insulin and 1 had a significant drug interaction with tacrolimus and Kaletra resulting in seizures. 1 transplanted patient had graft dysfunction, recurrent breakthrough HIV activity and died from complications of a liver biopsy. The other 3 patients are well with well-controlled HIV at a median follow-up of 21 months (range 5–40). Of the two patients not transplanted, one patient was treated with high dose steroids and recovered and one patient died.

Conclusion HIV+ve patients with acute liver failure can be successfully transplanted. Complications in the postoperative period are similar to those of HIV−ve patients although drug interactions can complicate post-transplant immunosuppressive management. In this series giving pulsed methylprednisolone does not appear to have a deleterious effect on their HIV. Liver transplantation can be a life saving treatment that should be considered in this group of patients.

Competing interests None.

Keywords acute liver failure, antiretrovirals, HIV, liver transplantation.