Liver transplantation in an undiagnosed schizophrenic

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Psychiatric illnesses can mimic medical conditions and vice versa. In the case of fulminant hepatic failure, it is important to establish whether the patient has any psychiatric or medical conditions that might contraindicate treatment by liver transplantation. Psychiatric assessment will also give an indication of quality of life and suicide risk[1]. However, comprehensive psychiatric assessment, without helpful informants, is extremely difficult when the patient has hepatic encephalopathy. We present such a case.

CASE HISTORY

A woman aged 30 was admitted in fulminant hepatic failure after a paracetamol overdose three days earlier. She had no relevant medical or psychiatric history according to her family and records at that time. She came from a family of nine children and had left school at the age of 15. At 19, she had lost her first son. At 30 she was unemployed, had been in her current relationship for 5 years and had another son, aged 4. The suicide attempt was thought to be an impulsive decision, after arguments with her partner. Within 24 h after admission to the liver unit she rapidly deteriorated with a prothrombin time of 160 s, serum creatinine 400 μmol/L, arterial blood pH 7.38 and a grade 3 encephalopathy. Since there were no obvious contra-indications, she had a liver transplant the same day. Both physical and mental state improved dramatically, although she remained dialysis-dependent for another month. She was eventually discharged on the usual post-transplant regimen of azathioprine, cyclosporin, prednisolone and co-trimoxazole.

Two months later she was readmitted with auditory hallucinations. Steroid-induced psychosis was diagnosed and haloperidol was started with good response. Three months after the transplant, further admission was required for worsening auditory hallucinations after stopping haloperidol. The voices were second-party in nature, encouraging her to hurt herself. Her mother then revealed that the patient had been experiencing similar hallucinations before the overdose.

Haloperidol was restarted and her symptoms resolved rapidly. She has remained well and continues regular follow-up at both liver transplant and local psychiatric clinics.

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COMMENT

At present the main psychiatric contraindications to liver transplantation in paracetamol-induced hepatic failure are a history of repeated suicide attempts and a wish to die persistently expressed before the onset of encephalopathy[1]. Neither was present in our case. The prevalence of psychiatric morbidity in the liver transplant population seems to approximate that of the normal population[2]. Common types of illness post-transplant include depression, delirium, anxiety disorders and organic mood disorder. However, certain factors do predict poor psychological outcomes post transplant—notably, social and family dysfunctional relationships and underlying psychological problems[3]. Our patient had had all of these.

The other confounding factor in this case was the possibility of steroid-induced psychosis: serious mental illness occurs in over 5% of corticosteroid treated patients[4,5], and female gender, systemic lupus erythematosus and high dose prednisolone are thought to be major risk factors. Symptoms do tend to resolve with cessation of the drug, but stopping prednisolone soon after the transplant would have been detrimental to allograft survival.

This case highlights the difficulties arising from limited psychiatric services. Mitchell *et al.*[1], from the Scottish Liver Transplant Unit, found that each patient's assessment took at least one hour and a comprehensive assessment could not be provided. The diagnosis of schizophrenia is not easily made in patients such as ours and we think psychiatric review should be performed by senior and experienced staff. If schizophrenia had been diagnosed preoperatively, would she have had the operation? The excellent outcome to date indicates that the decision to operate was correct.

REFERENCES

1 Mitchell JR, Lang FH, Masterson G. Providing a psychiatric service to liver transplant patients. *Psychiatr Bull* 1997;**21**:6–9

2 Commander M, Neuberger J, Dean C. Psychiatric and social consequences of liver transplantation. *Transplantation* 1992;**53**:1038–40

3 Surman OS. Psychiatric aspects of liver transplantation. *Psychosomatics* 1994;**35**:297–307

4 Ismail K, Wessely S. Psychiatric complications of corticosteroid therapy. *Br J Hosp Med* 1995;**53**:495–9

5 Kostic V, Levic Z. Psychiatric disorders associated with corticosteroid therapy. *Neurologija* 1989;**38**:161–6