

A BEST-PRACTICE MODEL FOR MANAGEMENT OF BLOOD-BORNE VIRUS (BBV) TESTING AND IMMUNISATION IN HAEMODIALYSIS (HD)

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PROBLEM Renal Association (2002) guidelines recommend that all long-term patients on dialysis should be tested for and immunised against hepatitis B virus (HBV) and tested for hepatitis C virus (HCV). The challenge is ensuring that all patients on dialysis are tested and immunised according to these guidelines.

PURPOSE The aim of the study was to identify a practical and realistic model that ensured that all patients were tested and immunised appropriately. Review of patient records from 2001 demonstrated that quite a few patients had not been fully immunised. For patients who had completed a course, antibody response was not uniformly recorded, making it difficult to distinguish between poor responders and non-responders. There are around 340 patients on the dialysis programme. The Department of Health issued new guidelines for BBV in renal units in 2002. We decided to develop a system for screening and immunising our dialysis patients in keeping with the new guidelines.

DESIGN . An evidence-based unit protocol for management of blood-borne viruses was written. We devised a simple and practical tool for BBV screening and immunisation. Using details of previous immunisation and antibody titres, this program automatically identifies the dates for subsequent immunisation, booster doses and antibody titres. The database also identifies whether a patient is immune to HBV or is a poor or non-responder, dependent on titre results. The database is updated monthly, and includes patients on PD and patients who are seen in the pre-dialysis clinic. Monthly review meetings between haemodialysis and peritoneal dialysis nurses, a microbiologist, the nephrologists and the audit team address issues such as outstanding tests/vaccinations.

FINDINGS Since the inception of this program, we have been able to accurately identify non-responders to HBV immunisation. In the unlikely event of an outbreak of hepatitis B, these patients can be offered hepatitis B immune globulin. We have also significantly increased the number of patients who have developed immunity to hepatitis B following vaccination. A significant number of these patients have required two courses of vaccination.

CONCLUSION Outbreaks of BBV infection can have devastating effects on the running of a dialysis unit. With a robust mechanism for screening and immunisation, the risks of this occurring are significantly reduced. We have implemented the recommended guidelines on prevention of blood-borne viruses and have developed a user-friendly program for ensuring adherence to established protocols. This has become an extremely useful tool for audit and surveillance of BBV infections in our unit.