

FOLLOW UP OF PATIENTS WITH CHRONIC RENAL FAILURE AFTER HEPATITIS B IMMUNISATION

L Ridley, L Green, M Higginbotham, C Jones, D Richardson & D Worth
York Hospital

PROBLEM: Guidance from the Department of Health (DH) and the Renal Association recommends vaccinating patients against hepatitis B as soon as it is anticipated that they may require dialysis or transplantation. We responded to this guidance by preparing some guidelines for hepatitis B vaccination and contacting all our dialysis population to recommend vaccination. Predialysis patients requiring vaccination were identified in the renal clinics. Nine months after the initial vaccination campaign we wanted to know whether vaccination had been successful in terms of the number of patients completing the course and antibody response.

PURPOSE: To establish the response of the haemodialysis (HD) population that had received 3 doses of hepatitis B 40microgram vaccine by measuring antibody levels within 1 and 4 months of completing the course and comparing the outcome in our patients to the 60% response rate predicted by the DH.

DESIGN: A letter was sent to all HD and peritoneal dialysis patients asking them to contact their GP and arrange vaccination against hepatitis B. We wrote to the GP with a copy of our guidance and a vaccination record sheet. We recorded the date we had contacted the patient and the GP and the date vaccination was complete. Antibody levels were checked within 1 and 4 months of the completion date. The antibody level was recorded and the GP and patient informed if a booster dose was needed. All the information was recorded electronically to facilitate shared patient records, which were maintained by the renal pharmacist, CAPD nurses and predialysis nurse.

FINDINGS: 100 HD patients and their GP's were contacted. 40 patients had completed the course of vaccinations and had antibody levels checked. 26 patients were part way through the course of treatment. Of the 40 patients who had completed the vaccination regime, 47.5% had not responded (antibody level < 10 Iu/ml), 22.5% had a response and required a booster vaccination (antibody level 10-100 Iu/ml) and 30% of the patients had a good response (antibody level >100 Iu/ml). 45 peritoneal dialysis and 32 predialysis patients are currently being vaccinated.

CONCLUSION: The response of the HD population to date reflects the population data quoted by the DH. It was agreed that we should continue to immunise our patients and review the results annually. Patients who were classified as non-responders were not going to receive any further vaccination. Patients who required a booster dose will be followed up with an annual antibody level check. Patients who had a full response will have antibody levels checked every 5 years.

RELEVANCE: Vaccination of a large population of patients requires clear guidance for all health professionals involved and a systematic approach to maintaining patient records. We have developed an approach to vaccinating our renal patients, which enables us to follow up and monitor the response to treatment. 34% of the HD patients targeted initially had not started the course of vaccination and were followed up with both verbal and written advice regarding hepatitis B immunisation. The total cost of immunising our renal population to date is estimated to be £18500. It is important that we can demonstrate to the PCT that this money has been spent effectively.