



Management of renal problems in Australian general practice

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The BEACH program, a continuous national study of general practice activity in Australia, gives us an overview of consultations involving the management of renal problems. In this analysis, we have included renal failure, glomerulonephritis/nephrosis (all forms of nephritis and nephrotic syndrome), renal insufficiency, nephropathy (including diabetic and analgesic), and uraemia and nephrosclerosis grouped as 'other'. This synopsis provides a backdrop against which articles in this issue of *Australian Family Physician* can be further considered.

Management of renal problems

Renal problems were recorded as a diagnosis in BEACH 1289 times between 1998 and 2004, at a rate of 0.2 per 100 encounters. This represents an average of 190 000 encounters at which renal problems were managed in general practice across Australia in any one year. Renal failure was by far the most common of these conditions, accounting for over two-thirds. Glomerulonephritis/nephrosis made up 13.4%, renal insufficiency 9.7%, and nephropathy 7.1% of renal problems managed (*Figure 1*).

Age and sex of patients

The age and sex distribution of patients at encounters where a renal problem was managed (referred to here as renal encounters) differed somewhat from the BEACH average. Males accounted for 50% of patients (compared with 40% in all encounters), and a higher proportion of patients were aged over 65 years (62% compared with an average of 26%).

The age and sex specific rates show the management pattern for each age group or sex. Renal problem management was very low in patients aged less than 45 years and rates rose with age to 0.6 per 100 encounters with patients aged 75 years and over. Men were more likely to present with these conditions (0.3 per 100 male encounters) than women (0.2 per 100 female encounters).

Patient reasons for encounter

The most common reason for attendance at a renal encounter was request for a prescription, stated by patients at a rate of 17.9 per 100 of these encounters. The same rate was recorded for 'other urinary disease', which included renal failure and renal insufficiency. Test results and cardiac check-up were also common.

Other problems managed

The top 10 other problems managed at renal encounters reflected the age group of patients for whom renal problems were most frequently managed. Hypertension was managed at a rate of 20.0 per 100 renal encounters, and diabetes at 10.0 per 100. Heart failure and lipid disorders were managed at rates of 6.7 and 5.1 respectively.

Medications

In BEACH, the average rate of medication prescription/advice/supply is approximately 70 per 100 problems managed, but for renal problems the rate was much lower at just 48.5 per 100. Frusemide was the most frequently recorded medication, at a rate of 6.7 per 100 renal problems. Erythropoietin was recorded at a rate of 4.9 and calcium carbonate at 4.0 per 100 renal problems managed.

Nonpharmacological management

Nonpharmacological treatments such as

counselling, therapeutic and diagnostic procedures were provided at a rate of 23 per 100 renal problems. This was low compared with the BEACH average of approximately 35 per 100 problems. Observation/health education/advice was the most commonly recorded, at a rate of 10.6 per 100 renal problems managed.

Referrals

Referral rates were higher than the BEACH average (11.6 compared with 8.0). Referrals were most frequently made to urologists, at a rate of 4 per 100 renal problems managed.

Pathology and imaging orders

Pathology tests were ordered at a rate of 70 per 100 renal problems, which was approximately double the average BEACH rate. Electrolytes, urea and creatinine tests were the most frequently ordered, at 14.4 per 100 renal problems managed. Full blood counts were ordered at a rate of 12.9 per 100.

Imaging orders associated with renal problems, recorded at a rate of 4.2 per 100, were somewhat lower than the BEACH average. Fifty percent of these orders were for ultrasounds of the kidney or renal tract.

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