G2 Incidence of native renal biopsy in Scotland

Introduction

For many patients with renal disorders, accurate interpretation of a percutaneous renal biopsy is important to establish the diagnosis and to guide treatment and prognosis. It is a very expensive investigation and it carries some risks. The incidence of native (non-transplant) renal biopsy in Scotland is not known. Evidence from biopsy registries indicates that the incidence of renal biopsy in other countries varies widely. Indications for native renal biopsy are largely opinion based.

Aim

We report the incidence of native renal biopsy in Scotland between 01 January 2002 and 31 December 2006.

Methods

Data on all consecutive adult native renal biopsies performed in 9 Scottish renal units between 01 January 2002 and 31 December 2006 were obtained from the regional renal pathologist. Population estimates were taken from the 2001 government census. The 9 renal units were: Aberdeen, Crosshouse, Dumfries, GRI, Monklands, Ninewells, QMHD, Raigmore and WIG.

Results

Between 01 January 2002 and 31 December 2006, 2480 native renal biopsies were performed. The mean annual incidence was 496 biopsies per year equating to 119.5 biopsies per million population per year (PMP/yr).

The overall incidence varied from year to year but there was no clear trend in the 5 year period studied. The annual incidence in 2002 was 121.2 PMP compared with 125.3 PMP in 2006 (Figure G2.1).

G2.1 Number of native renal biopsies PMP/year, all renal units combined



G2.2 Number of biopsies performed per million population per year in each renal unit



There was considerable variation in the incidence of native renal biopsy between units, from a lowest annual incidence of 65.8 PMP/yr at QMHD in Fife to the highest of 170.7 PMP/yr at NINE in Tayside.

G2.3 Number of biopsies performed per million population per year in each renal unit between 2002 and 2006



There was also variability in annual incidence within renal units, for example in XH (population 368149) the annual incidence varied from 84.2 PMP in 2002 to 165.7 PMP in 2005.



The mean age at the time of biopsy was 55.6 (SD 1.3) years. It was lowest at NINE (51.4) years and highest at DGRI (59.4) years.

G2.5 Percentage of males biopsied in each renal unit by year



56.9% of patients biopsied were male. The proportion of males was lowest at DGRI (43.9%) and highest at QMHD (69.2%).



The incidence of native renal biopsy in Scotland (per million population) is higher than that reported in other European national registries.

Conclusions

There is wide variability in annual incidence of native renal biopsy both between and within renal units in Scotland.

This work has been published ⁶.

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