

**SCREENING FOR NEPHROPATHY AND PRIORITISATION OF PATIENTS
FOR REFERRAL TO RENAL PHYSICIANS IN AN ANNUAL REVIEW
DIABETIC CLINIC**

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OBJECTIVE: To audit the process of screening for incipient diabetic nephropathy and the pattern of referral to the renal physicians. The aim is to improve clinical effectiveness within the available resources and to refine the service to meet NICE guidelines and national service framework (NSF) targets for diabetes.

DESIGN: A one year retrospective study of all attendees at diabetes annual review clinics of a large teaching hospital was undertaken (1/1/2001-31/12/2001). The data was collected from the electronic database DIAMOND. Notes review was undertaken at the end of 2002 of patients with se Cr >150 $\mu\text{mol/l}$ or proteinuria measurement.

RESULTS: 1167 patients had attended the clinic, mean age 71.2 years.

Urine dipstix was recorded for 941(80.6%). Of these 941 patients, 755 had 0/ trace protein, 129 had 1+, 33 had 2+ and 24 had 3+ proteinuria. 24 hour urine protein was measured in 57 patients (17 in 0/trace group, 11 of 129 in 1+ group, 14 of 33 in 2+ group, 15 of 24 in 3+ group). 14 patients had proteinuria >1 gram day⁻¹ (g/d), of whom 11 were referred to renal services. 24 had proteinuria 0.5-1 g/d, 5 referred. 19 had proteinuria <0.5 g/d, 3 referred, all with serum creatinine (se Cr) >150 $\mu\text{mol/l}$.

Serum creatinine was checked for 1106 (94.7%). 967 had se Cr < 150 $\mu\text{mol/l}$. 94 (8.5%) had se Cr 151-200 $\mu\text{mol/l}$, of whom 9 (10%) were referred, (of these 3 had had proteinuria measured, all <0.5g/d). 45 (4.06%) had se Cr >200 $\mu\text{mol/l}$, of whom 40 (89%) were referred (7 had had proteinuria measured, all >0.5g/d). 1 patient with proteinuria > 1g/d and se Cr < 150 $\mu\text{mol/l}$ was referred.

CONCLUSION: These data highlight short falls in care compared with guidelines. Serum creatinine was checked in 94% of the patients. Most of the patients with dipstix proteinuria \geq 1+ did not have 24 hour quantification, representing a group requiring focus for investigation for nephropathy of non-diabetic as well as diabetic causality.

89 % of patients with serum creatinine >200 $\mu\text{mol/l}$ were referred for nephrology opinion, yet only 10% of patients with serum creatinine 151-200 $\mu\text{mol/l}$. This may reflect service pressures, in a setting of insufficient resources.

These data will influence the development of local referral guidelines, and illustrate the resources required to meet national guidelines.