Audit of secondary care diabetes and renal follow up in patients with moderate to severe CKD

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Introduction

We aimed to assess whether patients with diabetes mellitus (DM) and chronic kidney disease (CKD) in our locality are referred appropriately and managed in secondary care.

Methods

Using our pathology system, we identified patients with an HbA1c > 48 mmol/molHb and renal function check, between April and September 2016 and randomly selected patients for each stage of CKD. We determined their HbA1c level, CKD classification, annual urine ACR and if they were under secondary care.

Results

82 of 347 patients (24%) did not have a urine ACR checked within the last 12 months for all stages of CKD (1-5)

Table 1 shows where patients with diabetes and CKD3 and above are receiving their diabetes care; Table 2 shows where the same group of patients are receiving their renal care

Table 1

	Location of diabetes care	HbA1C>74 N=76	HbA1C 58-73 N=70	HbA1C <58 N=87	Total % in secondary diabetes care
CKD 3 N=99	Primary Care	81.0%	94.5%	100 %	**9%**
	Secondary Care	19.0%	5.5%	0%	
		(n=42)	(n=18)	(n=39)	
CKD 4 N=101	Primary Care	71.4%	75%	92.1%	**19.9%**
	Secondary Care	29.6%	25%	7.9%	
		(n=27)	(n=36)	(n=38)	
CKD 5 N=33	Primary Care	57.1%	62.5%	80%	**33.3%**
	Secondary Care	42.9%	37.5%	20%	
		(n=7)	(n=16)	(n=10)	
	Total % in secondary diabetes care	**25%**	**23%**	**0.1%**	

Table 2

	Location of renal care	HbA1C>74 N=76	HbA1C 58-73 N=70	HbA1C <58 N=87	Total % in secondary renal care
CKD 3 N=99	Primary Care	100%	100%	95%	**2%**
	Secondary Care	0%	0%	5%	
		(n=42)	(n=18)	(n=39)	
CKD 4 N=101	Primary Care	70%	66.7%	55.3%	**36.6%**
	Secondary Care	30%	33.3%	44.7%	
		(n=27)	(n=36)	(n=38)	
CKD 5 N=33	Primary Care	0%	0%	10%	**97%**
	Secondary Care	100%	100%	90%	
		(n=7)	(n=16)	(n=10)	
	Total % in secondary renal care	**19.7%**	**40%**	**32%**	

Of note, 106 patients had a HbA1c of > 74 mmol/molHb, of which only 30 of these (28.3%) were receiving secondary diabetes care; 48 of these patients had a HbA1c > 90 mmol/molHb, with only 9 of these in secondary diabetes care (18.8%)

Of all the patients under the care of the renal team (n=65), only 44.6% of these were also jointly under the care of the hospital diabetes team.

Conclusion

Patients who have co-existent CKD and DM require complex management including renoprotective medication, intense BP control and microalbuminuria management, in order to try and stop or delay progression of nephropathy, plus manage the increased risk of additional complications. Our results show significant under-representation of secondary diabetes care in those with poor glycaemia and among those with poor renal function. These patients are most likely to benefit from established therapies.

Nearly a quarter of patients were not screened with urine ACR, which may be in part due to annual the urine ACR no longer forming part of the QOF requirements in primary care.

We have identified that in our local area, improvements need to be made for screening and referral to secondary care, particularly for diabetes. Our aim is to integrate a revised pathway with periodic interrogation of electronic databases to identify patients who may benefit from collaborative follow up.