

# AUDIT ON THE MANAGEMENT OF MICROALBUMINURIA IN PEOPLE WITH TYPE 2 DIABETES IN SECONDARY CARE

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## Introduction

- Albuminuria is a well-known predictor of poor renal outcomes in patients with type 2 diabetes and in essential hypertension.<sup>1</sup>
- Albuminuria is known to be a predictor of cardiovascular outcomes in these populations and it has been shown that reduction of albuminuria leads to reduced risk of adverse renal and cardiovascular events.<sup>2</sup>
- Therefore, it is imperative that albuminuria should not only be measured in all patients with type 2 diabetes but also steps should be taken to suppress albuminuria to prevent future renal and cardiovascular adverse events.

## Aims/Objectives

- To audit the adequacy of management of microalbuminuria/proteinuria in patients with type 2 diabetes in Secondary care

## Methodology

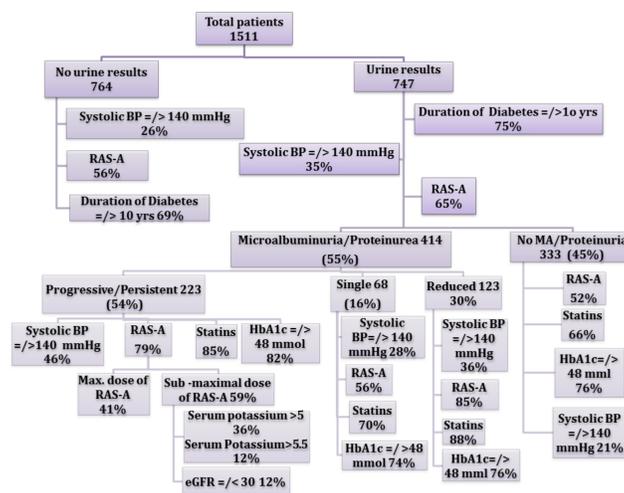
- Audit data was collected using integrated diabetes register for 1,511 people with Type 2 diabetes who attended diabetes clinics from 1st February 2013 to 30th November 2013. It was analysed and compared against NICE guidelines for chronic kidney disease and diabetes.

## Analysis

### Number of patients 1511

- No Urine results: 764 (51%)
- Urine results: 747 (49%)

Further details of analysis are as follows:



### Comparison between MA/proteinuria and non-MA groups

Urine results N=747	Systolic BP $\geq$ 140 mmHg	RAS-A	STATINS	HbA1c $\geq$ 48 mmol
Microalbuminuria N=414	40%	77%	84%	79%
No microalbuminuria N=333	21%	52%	66%	76%

### Double Blockade

Total number of patients on double blockade in 2013 (Feb-Nov): 82

Compared to latest visit:

- Continued with double blockade: (73%)
- Changed to one drug: 19%
- Both stopped: 7%

## Conclusions

- 51% of patients who attended diabetes clinics did not get their urine tested for microalbuminuria
- 40% patients with microalbuminuria had systolic BP  $\geq$  140 mmHg
- 59% patients with persistent/progressive microalbuminuria, who were on RAS-A, were on sub-maximal doses of Renin-aldosterone system antagonist.
- 73% patients who were on double RAS blockade in 2013 have continued with both drugs
- 79% patients with MA had their HbA1c  $\geq$  48 mmol/l

## Recommendations

- All patients should get urine tested for microalbuminuria at least once every year
- GPs should be liaised for those who did not have MA tested in the secondary care
- Strict BP and glycaemic control should be achieved in those with MA/proteinuria
- Dose of RAS-A should be maximised in order to reduce MA/proteinuria
- Patients should be educated regarding the importance of checking urine for microalbuminuria and achieving good BP and glycaemic control
- Those who are on double RAS-A blockade, should be switched to one RAS-A

## References

1. Berrut G, Bouhanick B, Fabbri P, Guilloteau G, Bled F, Le Jeune JJ, Fressinaud P, Marre M: Microalbuminuria as a predictor of a drop in glomerular filtration rate in subjects with non-insulin-dependent diabetes mellitus and hypertension. Clin Nephrol 48:92–97, 1997
2. Seema Basi, MD, MSCI, Pierre Fesler, MD, Albert Mimran, MD and Julia B. Lewis, MD; Microalbuminuria in Type 2 Diabetes and Hypertension: A marker, treatment target, or innocent bystander? doi: 10.2337/dc08-s249