آغا خان یونیورسٹی ہسپتال
The Aga Khan University Hospital

THE AGA KHAN UNIVERSITY HOSPITAL
CLINICAL LABORATORIES

UPDATE
URINARY ALBUMIN EXCRETION (UAE) IN 24 HRS URINE

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INTRODUCTION:

Urinary albumin excretion is used to screen for early kidney disease in patients at risk of kidney injury, such as high blood pressure or diabetes. Urinary albumin excretion (UAE) is defined as excretion of albumin in urine per day (24 hours), usually expressed as mg/24 hours. UAE is calculated using the following formula:

UAE = Albumin (mg/dl) x Volume of 24 hours urine (dl)

Microalbuminuria, defined as urinary excretion of albumin of 30-300 mg/24hrs in timed urine sample, is a predictor of nephropathy and is usually the first indication of kidney injury in diabetic patients. So monitoring of albuminuria is recommended in all patients having diabetes, hypertension and kidney diseases. The National Kidney Foundation guidelines for the management of patients with diabetes and microalbuminuria recommend that all type 1 diabetic patients older than 12 years, and all type 2 diabetic patients younger than 70 years have their urine tested for microalbuminuria yearly when they are under stable glucose control.

PRINCIPLE:

Urine albumin is analyzed by Immunoturbidimetric methodology.

SPECIMEN REQUIREMENTS:

For a 24-hour urine collection bladder should be emptied in the morning and first void should be discarded. Then all subsequent urines for the next 24 hrs should be collected in the container (s) provided. Next morning urine should be added in the same container to complete the collection.

REFERENCE RANGE:

Normal: <30 mg/24hrs
Micro albuminuria: 30-300 mg/24hrs
Macro albuminuria: >300 mg/24hrs

LIMITATIONS: Because of variability in urinary albumin excretion, two of the three specimens collected within a 3 to 6 month period should be abnormal before diagnosis of microalbuminuria.

SCHEDULE: Next day reporting.

PLEASE FILE FOR QUICK REFERENCE