

## Waist circumference can predict dialysis adequacy

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**Aim:** The aim of the present work is to study the relation between obesity in patients with end stage renal failure on hemodialysis and some biochemical parameters as well as hemodialysis adequacy measured by Kt/V.

**Subjects & Methods:** The study population include 54 adult patients with end stage renal failure on regular hemodialysis for more than six months in Mansoura Nephrology and Dialysis Unit. Anthropometric data, such as dry weight, height, waist circumference (WC) and body mass index (BMI) were assessed, and biochemical tests were conducted for hemoglobin (HB), calcium, phosphorus, parathyroid hormone, serum ferritin, transferrin saturation, in addition Kt/V was calculated. Patients were divided into 2 groups according to BMI using cutoff value of 30, patients were also divided according to WC using the Egyptian cutoff values for males and females.

**Results:** Based on BMI, there was no difference between obese and non obese patients in all the studied parameters. When patients were divided according to WC, those with above normal WC had significantly lower Kt/v than those with normal WC. Regression analysis showed that WC was a significant negative predictor of adequacy of dialysis in all study participants even after adjustment for BMI and other studied parameters.

**Conclusion:** WC is a strong predictor of adequacy of hemodialysis. Well dialysed patients had lower WC.

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