

Autonomic nervous function in patients with chronic renal failure at the Kenyatta National Hospital

Abstract:

Autonomic nervous function was assessed in twenty two patients (16 males and 6 females) with chronic renal failure on conservative management. The presenting symptoms were postural dizziness in 10(45%), impotence in 4(18%) patients and 1 patient each with diplopia, urinary urgency and nocturnal diarrhoea. The following autonomic function tests were performed; valsalva manoeuvre, heart rate response to deep breathing, heart rate response to posture and postural change in blood pressure. Fifteen (68%) patients had abnormal autonomic function tests. Out of these patients, 14(93%) had abnormalities of the parasympathetic system and only one had abnormalities in the sympathetic system. There was a negative correlation between the creatinine levels and the following; valsalva ratio ($r = -0.72$ $p < 0.001$), heart rate response to standing ($r = -0.56$ $p < 0.01$) and heart rate response to deep breathing ($r = -0.45$ $p < 0.05$).