Autonomic dysfunction in patients with chronic renal failure

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 ($r = -0.45 \ p < 0.05$).