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### **Obesity and Chronic Kidney Disease: The Perfect Storm**

The world is facing a growing epidemic of obesity that will impact on all aspects of health care, including Nephrology. Obesity has been identified as an independent risk factor for chronic kidney disease (CKD) and end-stage kidney disease. Experimental and clinical studies have revealed that obesity is associated with changes in kidney function characterised by glomerular hypertension and hyperfiltration as well as proteinuria, that are likely to accelerate CKD progression. In some patients with severe obesity, a specific glomerulopathy characterised by proteinuria and histological evidence of focal and segmental glomerulosclerosis has been described.

Thus obesity may cause kidney disease or exacerbate CKD due to other causes. Experimental and clinical studies show that the glomerular haemodynamic changes associated with obesity are reversible with weight loss, suggesting that weight reduction may be an effective intervention for slowing CKD progression. Obesity and CKD are both also associated with adverse changes in cardiovascular function including hypertension, endothelial dysfunction and arterial wall thickening. Weight loss may therefore also be important for reducing cardiovascular risk in obese patients with CKD.

Prospective trials are urgently required to evaluate the potential benefits of weight reduction in this group of patients.