

rate. Bariatric surgery is considered as the most effective treatment as it may halt and/or reverse progressive loss of renal function even in obese patients with stage 3 chronic kidney disease.

Despite the favorable impact of bariatric surgery on glucose tolerance, hypertension, dyslipidemia and renal function, it has been associated with a significant risk of oxalosis. Oxalate nephropathy is one of the under-reported complications of bariatric surgery as it manifests a year or so after surgery. The outcome of oxalate nephropathy after Roux-en-Y gastric bypass (RYGB) is poor and may lead to end-stage renal disease (ESRD) in a proportion of patients. Hence, if a patient develops acute deterioration of renal functional after RYGB, the differential diagnosis shall include oxalate nephropathy and renal biopsy shall be considered earlier to establish the diagnosis.<sup>[2]</sup> Nasr *et al.*<sup>[3]</sup> have reported oxalate nephropathy after RYGB. The prognosis of oxalate nephropathy after RYGB seems to be dismal, with progression to ESRD within 3 months in 72.7% of patients as observed. Schuster *et al.*<sup>[4]</sup> stated that the main menace to renal function after bariatric surgery is a high frequency of hyperoxaluria, a risk factor for oxalate nephropathy, which varies from 8% to 42% respectively. This predisposition to develop high oxalate excretion rates incited Ahmed and Byrne<sup>[5]</sup> to point to the precarious balance after bariatric surgery between benefit and increased risk. Interestingly, similar complications were observed with orlistat, which reduces intestinal fat absorption and brings down body weight. Though cholestyramine binds oxalate at intestine and prevents its absorption, the results are variable. However, recent studies revealed that gastric banding does not cause hyperoxaluria, when compared to RYGB.

Unfortunately, there are no guidelines for the management of oxalate nephropathy after RYGB. However, improvement in renal function after reversal of bypass surgery is controversial and needs to be clarified. It is therefore suggested that patients undergoing RYGB shall be informed about the possibility of hyperoxaluria and oxalate nephropathy at the time of informed consent and counseled for long-term follow-up of renal function and periodical assessment of metabolic parameters along with dietary modifications to avert/minimize these risks. Extensive pre-operative preparations by the surgeons regarding diet, physical activity and life-style are vital to prevent this catastrophic complication. Discharge counseling and education shall include verbal and written instructions and the possibility of oxalate nephropathy. Further research is warranted in this area so as to establish evidence-based guidelines to decrease the risk of oxalate nephropathy after bariatric surgery.

## Concern, counseling and consent for bariatric surgery

Sir,

We read the article by Nagaraju *et al.* with great interest.<sup>[1]</sup> The incidence of obesity is increasing at an alarming rate across the globe. Obesity is an independent predictor for the development and progression of chronic kidney disease and modifiable risk factor for renal diseases. Though an array of non-operative options are available for weight loss, these are associated with high failure

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