

## Anesthetic considerations in Townes-Brocks syndrome

Sir,

The article “Townes-Brocks syndrome (TBS) with overlapping features of hemifacial microsomia” by Guruprasad and Chauhan<sup>[1]</sup> brings into focus of several factors like proper diagnosis and early management of facial and other deformities with special consideration for risk of anesthesia and associated drugs due to the presence of unilateral renal agenesis. A high incidence of genitourinary abnormalities is found in TBS. These include unilateral or bilateral hypoplastic or dysplastic kidneys, renal agenesis, multicystic kidney, posterior urethral

valves, vesicoureteral reflux and ureteral stenosis. This requires the need for renal imaging and monitoring of renal function in TBS patients.<sup>[2,3]</sup> Another issue that arises out of unilateral renal agenesis is increased “wear and tear” of the lone functional kidney. Since it serves the role of two kidneys, the compensatory kidney is more prone to fail in reabsorbing protein efficiently. A likely consequence is proteinuria, which is a heavy indicator of kidney damage. The ability to filter the blood at an efficient rate is also subject to failure, which is diagnosed as a decreased glomerular filtration rate.<sup>[4]</sup>

Anesthetic management includes titration of perioperative drugs keeping in view degree of renal disease. Perioperative fluid management also needs to be meticulous. Renal involvement demands titration or avoidance of nephrotoxic drugs like non-steroidal anti-inflammatory drugs and antibiotics.<sup>[4,5]</sup> Drugs excreted from kidneys like pancuronium are to be avoided. Low doses of drugs are to be administered and meticulous perioperative fluid management is to be done to prevent nephrotoxicity, metabolic acidosis and further progression to renal failure.<sup>[4,5]</sup> The knowledge and ability of the anesthesiologist to anticipate the challenges in managing patients presenting for surgical repair, plays an important role. Anticipating potential perioperative problems and communicating with the surgeon are essential in managing congenital defects in children.

**Yadavalli Guruprasad, Dinesh Singh Chauhan**

*Department of Oral & Maxillofacial Surgery, AME'S Dental College  
Hospital & Research Centre, Raichur, Karnataka, India*

**Address for correspondence:**


Dr. Yadavalli Guruprasad,  
Department of Oral & Maxillofacial Surgery, AME'S Dental College Hospital

& Research Centre, Raichur - 584 103, Karnataka, India.

E-mail: guru\_omfs@yahoo.com

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