

## CHALLENGES OF GASTROSTOMY TUBE MIGRATION



Gastrostomy feeding tubes may be used to provide long-term enteral nutrition for a period >4-6 weeks.<sup>1</sup>

- Complications of gastrostomy tubes are not uncommon and may interfere with the quality of life of patients.<sup>2</sup>

Gastrostomy tube migration is a known phenomenon, predominantly associated with the use of balloon-type tubes without external bumpers and can result in several complications.<sup>3</sup>

### Consequences of tube migration



Gastric outlet or small bowel obstruction<sup>3</sup>



Aspiration<sup>4</sup>



Pain, cellulitis, and possible disruption of feedings due to leakage of gastrointestinal (GI) secretions onto the skin<sup>4</sup>



Emesis, if a distended balloon-tip PEG tube is impacted at the pylorus<sup>5</sup>



Pancreatitis<sup>3</sup>, and irritation of the small bowel causing GI erosion and perforation<sup>5</sup>



Retrograde jejuno-duodenal intussusception with bowel ischemia<sup>5</sup>

### Ways to prevent tube migration

- A gastrostomy tube with an external bumper can be used to prevent tube migration as a result of peristalsis.<sup>5</sup>
- Use of Foley catheters should be discouraged as they are more likely to migrate due to the absence of the external bumper (to secure the tube to the abdominal wall), and markings on the surface of the catheter (that does not allow measurements of the depth of balloon placement).<sup>6</sup>

In case of tube replacement required later, replacement of the foley catheter with a gastrostomy tube with an external retaining device, or a gastrostomy button may also help resolve the problem of tube migration.<sup>5</sup>

### DID YOU KNOW ?

Gastro-duodenal invagination (through peristalsis) or migration (caused by loosening of the external bolster with time) of the PEG catheter tip into the duodenum can be a cause of gastric outlet obstruction, and in Japan, it is often called the 'ball valve syndrome'.<sup>7</sup>

This syndrome was first described in 1946 by Hobbs and Cohen and usually refers to the gastro-duodenal invagination of large gastric polyps that cause intermittent obstruction to gastric outflow.<sup>7</sup>

A way to prevent ball valve syndrome (when caused by the tip of the PEG catheter) is by proper placement of the external bolster.<sup>7</sup>



### OUR SOLUTION

AVANOS MIC\*/MIC-KEY\* enteral feeding tubes and accessories include a variety of innovative product designs for gastric, jejunal and gastro-jejunal access.<sup>8</sup>



Our MIC\* Gastrostomy and MIC\* PEG tubes have a SECUR-LOK\* external retention ring or bolster with aeration holes to allow air to circulate around the stomach, and feet to allow for contact point to the skin to be changed.<sup>9,10</sup>



MIC-KEY\* low-profile gastrostomy feeding tubes have fixed external base (or bolster), that helps prevent the tube from migrating into the stomach.<sup>9</sup>

PEG, percutaneous endoscopic gastrostomy

#### References:

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