

Editorial **Pediatrics**



Pediatric Percutaneous Endoscopic Gastrostomy in Korea - When? By Whom? How?



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► See the article "Nationwide Survey for Pediatric Gastrostomy Tube Placement in Korea" in volume 37, number 40, e291.

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In Korea, gastrointestinal and colonic endoscopic examinations have been performed in pediatric patients longer than 3 decades and endoscopic procedures are almost performed routinely for pediatric gastrointestinal patients.¹ However, we, pediatric endoscopists, have been frequently experienced patients' and their caregivers' misconception that endoscopy is an uncommon and highly invasive procedure. Furthermore, it is not restricted to lay population. In case of percutaneous endoscopic gastrostomy (PEG), because it's evidently more invasive than the diagnostic endoscopic procedure, fear becomes even bigger. In that manner, understanding of indications, techniques and current situation in Korea of pediatric PEG is worthwhile.

In terms of indication, the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) position paper published in 2021, recommended that PEG is indicated when non-oral nutritional support is anticipated to be longer than 3–6 weeks or when transnasal tube feeding is unsafe. And it described that PEG insertion is a safe, quick and effective method that allows non-oral, enteral supportive nutrition in children who require it in the medium or long term.² This means that PEG is safer and inexpensive than maintaining parenteral nutrition for medium or long term even in children.

According to a North and Central American survey, 58.5% of pediatric PEG insertion performed by pediatric surgeons, 37.7% by pediatric gastroenterologists, and 17.0% by adult gastroenterologists.³ The higher portion of surgeon in North and Central America might be related with the origin of PEG insertion technique. In Korea, the involvement of pediatric gastroenterologist is even higher (80.6% vs 37.7%), however mostly (58.1%) collaboratively performed with other specialists and this might be somehow desirable because multidisciplinary team approach is recommended in the course of PEG placement.⁴

The technique of PEG insertion and selection of PEG type are another important aspect of PEG, and authors explained in detail the pull and push method of PEG insertion at discussion section. However, visual assistance could help better understanding of the technique, and there are some articles containing proper images. ^{5,6} In the current survey, pull method still is a dominant technique, however, shift to push method is seen in some degree. In terms of complications, only one fifth of the institutions reported experience of gastrostomy related complications. However, considering potential biases, this result should be interpreted cautiously.

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Lee et al.⁴ surveyed pediatric PEG status at 36 institutions in Korea. They reported 31 (86.1%) institutions performed PEG; 26 at Department of Pediatrics, 24 at Department of Surgery, 9 at Department of Internal Medicine, and 7 at Department of Radiology. Complications after gastrostomy included buried bumper syndrome, wound infection, leakage, tube migration, and incorrect opening site in the stomach, but the number of cases with complications was very small.⁴ The procedure is limited in some institutions but common and safe in Korea.

In conclusion, this survey outlined the current pediatric PEG status in Korea. As authors mentioned in the article, demand for pediatric gastrostomy is also not high compared to that of adults, but it is an important procedure from the perspective of the nutritional treatment for indicated patients. Therefore, further multicenter long-term prospective study undergoing these procedures is required.

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