

표 1 . 소아 핵심질문1 근거표

핵심질문 1

문헌정보	연구유형	대상자 수	문헌 질 KCIG
Stinger DA, Babyn PS, eds. Pediatric Gastrointestinal Imaging and Intervention. 2nd ed. Hamilton, Ontario, Canada: Decker; 2000.	Review/Other	N/A	5
Hilton S. The child vomiting. In: Hilton S, Edwards D, eds. Practical Pediatric Radiology. Philadelphia, Pa.: B C Decker; 1994:297-299.	Review/Other-D x	N/A	5
Ryan S, Donoghue V. Gastrointestinal pathology in neonates: new imaging strategies. Pediatr Radiol. 2010;40(6):927-931.	Review/Other-D x	N/A	5
4. Hernanz-Schulman M. Imaging of neonatal gastrointestinal obstruction. Radiol Clin North Am. 1999;37(6):1163-1186, vi-vii.	Review/Other-D x	N/A	5
Lilien LD, Srinivasan G, Pyati SP, Yeh TF, Pildes RS. Green vomiting in the first 72 hours in normal infants. Am J Dis Child. 1986;140(7):662-664.	Observational-D x	45 total newborns: 9 had surgical intervention, 5 had nonsurgical obstruction 31 had idiopathic bilious vomiting	4
Strouse PJ. Disorders of intestinal rotation and fixation ("malrotation"). Pediatr Radiol. 2004;34(11):837-851.	Review/Other-D x	N/A	5
Sizemore AW, Rabbani KZ, Ladd A, Applegate KE. Diagnostic performance of the upper gastrointestinal series in the evaluation of children with clinically suspected malrotation. Pediatr Radiol 2008; 38(5):518-528.	Observational-D x	166 patients	2
Hsiao M, Langer JC. Value of laparoscopy in children with a suspected rotation abnormality on imaging. J Pediatr Surg. 2011;46(7):1347-1352	Observational-D x	51 patients	2
Long FR, Kramer SS, Markowitz RI, Taylor GE, Liacouras CA. Intestinal malrotation in children: tutorial on radiographic diagnosis in difficult cases. Radiology. 1996;198(3):775-780.	Review/Other-D x	81 symptomatic children	5
Cribbs RK, Gow KW, Wulkan ML. Gastric volvulus in infants and children. Pediatrics. 2008;122(3):e752-762.	Review/Other-D x	7 cases from authors institution 58	5

		1 published cases (252 acute and 329 chronic cases)	
Lederman HM, Demarchi G. Disorders of the Esophagogastric Junction. In: Slovis TA, ed. Caffey's Pediatric Diagnostic Imaging. 11th ed. St Louis, Mo: Mosby/Elsevier Science; 2008:2042–2055.	Review/Other–D x	N/A	5
Orzech N, Navarro OM, Langer JC. Is ultrasonography a good screening test for intestinal malrotation? J Pediatr Surg. 2006;41(5):1005–1009.	Observational–D x	211 patients	3
Weinberger E, Winters WD, Liddell RM, Rosenbaum DM, Krauter D. Sonographic diagnosis of intestinal malrotation in infants: importance of the relative positions of the superior mesenteric vein and artery. AJR 1992; 159(4):825–828.	Observational–D x	337 infants	3
Menten R, Reding R, Godding V, Dumitriu D, Clapuyt P. Sonographic assessment of the retroperitoneal position of the third portion of the duodenum: an indicator of normal intestinal rotation. Pediatr Radiol. 2012;42(8):941–945.	Review/Other–D x	85 children	5
Karmazyn B. Duodenum between the aorta and the SMA does not exclude malrotation. Pediatr Radiol. 2013;43(1):121–122.	Review/Other–D x	N/A	5
De Giacomo C, Maggiore G, Fiori P, et al. Chronic gastric torsion in infancy: a revisited diagnosis. Australas Radiol. 1989;33(3):252–254.	Observational–D x	20 infants	3
Hayden CK, Jr., Swischuk LE, Rytting JE. Gastric ulcer disease in infants: US findings. Radiology. 1987;164(1):131–134.	Observational–D x	7 patients, 2 control groups; 20 patients each	3
Hernanz–Schulman M. Pyloric stenosis: role of imaging. Pediatr Radiol 2009; 39 Suppl 2:S134–139.	Review/Other–D x	N/A	5
Rescorla FJ, Grosfeld JL. Contemporary management of meconium ileus. World J Surg. 1993;17(3):318–325.	Observational–D x	60 neonates	4
O'Keefe FN, Stansberry SD, Swischuk LE, Hayden CK, Jr. Antropyloric muscle thickness at US in infants: what is normal? Radiology. 1991;178(3):827–830..	Observational–D x	145 consecutive patients: Group 1 (1–2 mm; 99 patients), Group 2	4

		(≥3 mm; 40 patients), Group 3 (2 to <3 mm; 6 patients)	
Rudolph CD, Mazur LJ, Liptak GS, et al. Guidelines for evaluation and treatment of gastroesophageal reflux in infants and children: recommendations of the North American Society for Pediatric Gastroenterology and Nutrition. <i>J Pediatr Gastroenterol Nutr.</i> 2001;32 Suppl 2:S1–31.	Guideline	N/A	1
Vandenplas Y, Rudolph CD, Di Lorenzo C, et al. Pediatric gastroesophageal reflux clinical practice guidelines: joint recommendations of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) and the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN). <i>J Pediatr Gastroenterol Nutr.</i> 2009;49(4):498–547.	Guideline	N/A	1
Seibert JJ, Byrne WJ, Euler AR, Latture T, Leach M, Campbell M. Gastroesophageal reflux—the acid test: scintigraphy or the pH probe? <i>AJR Am J Roentgenol.</i> 1983;140(6):1087–1090.	Observational–D x	49 total: 41 infants and 8 children	3
Villanueva–Meyer J, Swischuk LE, Cesani F, Ali SA, Briscoe E. Pediatric gastric emptying: value of right lateral and upright positioning. <i>J Nucl Med.</i> 1996;37(8):1356–1358.	Observational–D x	48 children: (1 week to 2 year of age)	3
Yapici O, Basoglu T, Canbaz F, Sever A. The role of coughing as a gastroesophageal–reflux provoking maneuver: the scintigraphical evaluation. <i>Nucl Med Commun</i> 2009; 30(6):440–444.	Observational–D x	125 patients	3
Orenstein SR, Klein HA, Rosenthal MS. Scintigraphy versus pH probe for quantification of pediatric gastroesophageal reflux: a study using concurrent multiplexed data and acid feedings. <i>J Nucl Med.</i> 1993;34(8):1228–1234.	Observational–D x	12 scintigraphic and pH probe studies in 11 children	4
Othman S. Gastroesophageal reflux studies using milk in infants and children—the need for multiple views. <i>Nucl Med Commun.</i> 2011;32(10):967–971.	Review/Other–D x	105 patients	5
Morigeri C, Bhattacharya A, Mukhopadhyay K, Narang A, Mittal BR. Radionuclide scintigraphy in the evaluation of gastroesophageal reflux in symptomatic and asymptomatic pre–term infants. <i>Eur J Nucl Med Mol Imaging.</i> 2008;35(9):1659–1665.	Observational–D x	106 pre–term infants (52 symptomatic, 54	3

		asymptomatic)	
Bowen A. The vomiting infant: recent advances and unsettled issues in imaging. <i>Radiol Clin North Am</i> 1988; 26(2):377–392.	Review/Other–D x	N/A	5
Heyman S, Eicher PS, Alavi A. Radionuclide studies of the upper gastrointestinal tract in children with feeding disorders. <i>J Nucl Med.</i> 1995;36(2):351–354.	Review/Other–D x	1	4
Argon M, Duygun U, Daglöz G, Omur O, Demir E, Aydogdu S. Relationship between gastric emptying and gastroesophageal reflux in infants and children. <i>Clin Nucl Med</i> 2006; 31(5):262–265.	Observational–D x	108 patients aged between 3 months and 5 years (77 boys, 31 girls) Group A, 0–2 years (57 patients), and Group B, 2–5 years (51 patients)	3
Cohen HL, Zinn HL, Haller JO, Homel PJ, Stoane JM. Ultrasonography of pylorospasm: findings may simulate hypertrophic pyloric stenosis. <i>J Ultrasound Med.</i> 1998;17(11):705–711.	Observational–D x	71 total patients aged 10–126 days: 37 patients with HPS, 34 patients with pylorospasm	3
Haller JO, Cohen HL. Hypertrophic pyloric stenosis: diagnosis using US. <i>Radiology.</i> 1986;161(2):335–339.	Review/Other–D x	N/A	5
Hernanz–Schulman M, Sells LL, Ambrosino MM, Heller RM, Stein SM, Neblett WW, 3rd. Hypertrophic pyloric stenosis in the infant without a palpable olive: accuracy of sonographic diagnosis. <i>Radiology.</i> 1994;193(3):771–776.	Observational–D x	152 consecutive infants	3
St Peter SD, Holcomb GW, 3rd, Calkins CM, et al. Open versus laparoscopic pyloromyotomy for pyloric stenosis: a prospective, randomized trial. <i>Ann Surg.</i> 2006;244(3):363–370.	Experimental–D x	200 total patients: 100 patients assigned to open and	1

		100 patients assigned to laparoscopic pyloromyotomy	
Swischuk LE, Hayden CK, Jr., van Caillie BD. Mega-aeroesophagus in children: a sign of gastroesophageal reflux. <i>Radiology</i> . 1981;141(1):73-76.	Review/Other-D x	47 infants and children (5 weeks to 14 years)	5
Di Ciaula A, Portincasa P, Di Terlizzi L, Paternostro D, Palasciano G. Ultrasonographic study of postcibal gastro-esophageal reflux and gastric emptying in infants with recurrent respiratory disease. <i>World J Gastroenterol</i> . 2005;11(46):7296-7301.	Observational-D x	66 total infants (age range, 1-12 mo), 35 infants (13 with chronic cough, 22 with recurrent bronchitis) and 31 controls	2
Blumhagen JD, Maclin L, Krauter D, Rosenbaum DM, Weinberger E. Sonographic diagnosis of hypertrophic pyloric stenosis. <i>AJR Am J Roentgenol</i> . 1988;150(6):1367-1370.	Observational-D x	326 consecutive sonograms in 319 infants, 4 observers	2
Forster N, Haddad RL, Choroomi S, Dilley AV, Pereira J. Use of ultrasound in 187 infants with suspected infantile hypertrophic pyloric stenosis. <i>Australas Radiol</i> . 2007;51(6):560-563.	Observational-D x	187 infants	4
Cohen HL, Blumer SL, Zucconi WB. The sonographic double-track sign: not pathognomonic for hypertrophic pyloric stenosis; can be seen in pylorospasm. <i>J Ultrasound Med</i> . 2004;23(5):641-646.	Observational-D x	91 consecutive patients	3
Foley LC, Slovis TL, Campbell JB, Strain JD, Harvey LA, Luckey DW. Evaluation of the vomiting infant. <i>Am J Dis Child</i> . 1989;143(6):660-661.	Review/Other-D x	112 total patients between ages 1 to 8 weeks 37 patients HP	5

		S, 46 patients GER without another abnormality, 13 patients abnormalities other than GER or HPS, 16 patients normal examination findings	
Forman HP, Leonidas JC, Kronfeld GD. A rational approach to the diagnosis of hypertrophic pyloric stenosis: do the results match the claims? J Pediatr Surg. 1990;25(2):262-266.	Observational-Dx	101 total infants	3
Olson AD, Hernandez R, Hirschl RB. The role of ultrasonography in the diagnosis of pyloric stenosis: a decision analysis. J Pediatr Surg. 1998;33(5):676-681.	Review/Other-Dx	N/A	5
RCR guideline – Projectile vomiting in infants(P24)	Guideline	N/A	1
RCR guideline – Recurrent vomiting in children(P25)	Guideline	N/A	1