

Medical Position Paper

Indications for Pediatric Gastrointestinal Endoscopy: A Medical Position Statement of the North American Society for Pediatric Gastroenterology and Nutrition

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Over the past 20 years, dramatic improvements in fiberoptic and video technology, conscious sedation, nursing support, and physicians' experience have enhanced the execution of pediatric endoscopy. Diagnostic and therapeutic endoscopic procedures, including esophagogastroduodenoscopy, colonoscopy, dilation, variceal sclerotherapy or banding, polypectomy, and percutaneous endoscopic gastrostomy, are performed annually in thousands of infants, children, and adolescents. Pediatric endoscopy has become a valuable tool in the evaluation of gastrointestinal bleeding, dysphagia, severe pain disorders, inflammatory bowel disease, and radiographic abnormalities and for tissue diagnosis, removal of foreign bodies, and other clinical situations (1-61).

Endoscopy should be only one facet of a thoughtful and informed medical evaluation by a physician who is familiar with the patient and has demonstrated competence in pediatric gastroenterology. Like all tests, pediatric endoscopy is useful only when it will lead to an alteration in diagnosis, treatment, or prognosis that may result in an improved outcome of health care. The decision to perform endoscopy is also influenced by the availability of the test and necessary expertise as well as by its cost. Studies of diagnostic accuracy have shown that endoscopy is also influenced by the availability of the test and necessary expertise as well as its cost. Studies of diagnostic accuracy have shown

that endoscopy is superior to radiography in the detection of peptic ulcers, polyps, and other mucosal abnormalities and that it offers the opportunity for tissue diagnosis or concomitant treatment not afforded by other diagnostic methods. Additional research that investigates cost, risk, and benefit in comparison with other diagnostic and treatment options will help determine the optimal usage of endoscopy in numerous clinical contexts.

A document outlining the indications for endoscopy in adults has been published by the American Society for Gastrointestinal Endoscopy. The North American Society for Pediatric Gastroenterology and Nutrition (NASPGN) also recognizes the need to formulate a medical position statement on the indications for endoscopy in infants, children, and adolescents—to promote optimal patient care, to foster learning, to guide practitioners, as well as to facilitate peer and other review of clinical practices.

The following recommendations were prepared with the approval of the Patient Care Committee and the authorization of the Executive Council of NASPGN. In addition, they have been endorsed by the American Society for Gastrointestinal Endoscopy's Standards of Care Committee and the American College of Gastroenterology's Practice Parameters Committee. These recommendations are subject to change based on periodic review of subsequent research. Nonetheless, they are provided as a tool for improving the outcomes of care and to advance our understanding of them.

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This is a position paper authorized by the Executive Council of the North American Society for Pediatric Gastroenterology and Nutrition and is being published without editorial review.

DIAGNOSTIC UPPER ENDOSCOPY WITH BIOPSY—GENERALLY INDICATED

After acute volume resuscitation has been initiated for gastrointestinal bleeding, endoscopy may

be considered for active, persistent, or recurrent bleeding, for hemodynamically significant hemorrhage, or to distinguish between variceal and non-variceal bleeding; for dysphagia, odynophagia, persistent refusal to eat, or persistent chest pain; for upper abdominal pain and/or discomfort with signs or symptoms suggesting serious organic disease (e.g., weight loss, anorexia, anemia), associated with significant morbidity (e.g., prolonged school absenteeism, hospitalization, limitation of usual activities), or from pain or discomfort which persists despite a course of therapy for suspected acid peptic disease; for persistent vomiting of unknown cause, when sampling of esophageal, gastric, duodenal, or jejunal tissue/fluid is indicated, for clarification of imaging studies of the upper gastrointestinal tract, known or suspected ingestion of a caustic material, or unexplained iron deficiency anemia.

DIAGNOSTIC UPPER ENDOSCOPY—GENERALLY NOT INDICATED

Diagnostic upper endoscopy is generally not indicated for uncomplicated gastroesophageal reflux, uncomplicated functional abdominal pain, or X-ray findings of uncomplicated gastroesophageal reflux, congenital hypertrophic pyloric stenosis, or isolated pylorospasm.

DIAGNOSTIC UPPER ENDOSCOPY—CONTRAINDICATED

Diagnostic upper endoscopy is contraindicated for perforated viscus.

SEQUENTIAL OR PERIODIC DIAGNOSTIC UPPER ENDOSCOPY AND BIOPSY—GENERALLY INDICATED

Sequential or periodic diagnostic upper endoscopy and biopsy is generally indicated for periodic surveillance for proven Barrett's esophagus, follow-up of selected ulcers or mucosal abnormality if it is likely to alter clinical management, follow-up for adequacy of prior sclerotherapy or other variceal treatment (e.g., banding, shunting), surveillance for gastric or duodenal polyps in the polyposis syndromes, or surveillance for rejection or other complications following intestinal transplantation.

SEQUENTIAL OR PERIODIC DIAGNOSTIC UPPER ENDOSCOPY—GENERALLY NOT INDICATED

Sequential or periodic diagnostic upper endoscopy is generally not indicated for surveillance of healed benign disease.

THERAPEUTIC UPPER ENDOSCOPY—GENERALLY INDICATED

Therapeutic upper endoscopy is generally indicated for removal of selected polypoid lesions, sclerotherapy or banding of esophageal varices during or following a bleeding episode; for dilation, placement of feeding tubes (percutaneous endoscopic gastrostomy, transpyloric), or treatment of persistent bleeding unresponsive to medical therapy; for removal of esophageal or sharp, foreign bodies, or objects retained in the stomach generally longer than two to four wk or temporally related to symptoms (e.g., vomiting, pain); or for button batteries, either emergently, if the battery is lodged in the esophagus, or when the battery has not passed beyond the pylorus after an appropriate time.

THERAPEUTIC UPPER GI ENDOSCOPY—GENERALLY NOT INDICATED

Therapeutic upper GI endoscopy is generally not indicated for sclerotherapy or banding of esophageal varices prior to first documented variceal bleed.

DIAGNOSTIC COLONOSCOPY AND BIOPSY—GENERALLY INDICATED

Diagnostic colonoscopy and biopsy are generally indicated for unexplained iron deficiency anemia, evaluation of unexplained gastrointestinal bleeding such as melena of unknown origin or hematochezia; for clinically significant diarrhea of unexplained origin, evaluation of inflammation bowel disease, evaluation of an abnormality on radiographic imaging which is likely to be clinically significant (e.g., filling defect, stricture); for intraoperative identification of a lesion that is not apparent at surgery, evaluation of patients for sexually transmitted diseases or rectal trauma (sigmoidoscopy only), or to obtain ileal or colonic tissue for diagnosis.

DIAGNOSTIC COLONOSCOPY—GENERALLY NOT INDICATED

Diagnostic colonoscopy is generally not indicated for acute self-limited diarrhea, GI bleeding with demonstrated upper GI source, chronic, stable irritable bowel syndrome or chronic nonspecific abdominal pain unassociated with significant morbidity; or for constipation and encopresis or inflammatory bowel disease responding to therapy.

SEQUENTIAL OR PERIODIC DIAGNOSTIC COLONOSCOPY AND BIOPSY—GENERALLY INDICATED

Sequential or periodic diagnostic colonoscopy and biopsy are generally indicated for surveillance for dysplasia/malignancy, patients with increased risk of colonic malignancy (e.g., after ureterosigmoidostomy, polyposis syndromes), or surveillance for rejection or other complications following intestinal transplantation.

DIAGNOSTIC COLONOSCOPY—CONTRAINDICATED

Diagnostic colonoscopy is contraindicated for fulminant colitis/toxic megacolon, suspected perforated viscus, or recent intestinal resection.

THERAPEUTIC COLONOSCOPY—GENERALLY INDICATED

Therapeutic colonoscopy is generally indicated for polypectomy, dilation of stenotic lesions, treatment of bleeding vascular anomalies, ulcerations, or a polypectomy site, reduction of sigmoid volvulus, or removal of foreign body.

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