

Guidelines for H pylori Infection in Children

Seyed Mohsen Dehghani MD

Professor of Pediatric Gastroenterology Hepatology

Iraj Shahramian MD

Professor of Pediatric Gastroenterology Hepatology



Fars Pediatric Association

چهارمین کنگره دوسالانه
استاد امیر حکیمی
The 4th Pediatric Congress
Professor Amirhakimi
F.A.R.S SHIRAZ
۲۵ اردیبهشت ۱۴۰۳

بزرگوارکننده:
انجمن متخصصین کودکان استان فارس
گروه کودکان دانشگاه علوم پزشکی شیراز

رئیس هیئت مدیره: دکتر سید محمدحسین کنگره
دبیران علمی کنگره: دکتر سید محسن دهقانی
دبیر اجرایی کنگره: دکتر محمدحسین کنگره
دبیر علمی کنگره: دکتر سید محمدحسین کنگره

محفل بزرگاری: ایران، فارس، شیراز
مجمع فرهنگی و رفاهی دانشگاه شیراز

مهاجرت ارسال مقالات: ۱۵ اردیبهشت ۱۴۰۳

دارای ۲۰ امتیاز
بازآموزی مدون

وب سایت رسمی کنگره
جهت ثبت نام حضور در کنگره
ارسال پوستر و سایر اطلاعات تکمیلی
www.amirhakimi.farsped.com

تلفن های تماس با دبیرخانه علمی کنگره
۰۹۱۷۹۷۲۸۰۱۷ | ۰۹۱۷۹۷۲۸۰۱۷
تلفن های تماس با دبیرخانه اجرایی کنگره
۰۹۱۷۵۶۷۹۲۸۳ | ۰۹۱۷۰۴۵۷۵۳۹

مجری برگزاری: **زوسپد**

www.amirhakimi.farsped.com

معرفی بیمار:

- کودک ۱۲ ساله با سابقه شکم درد مزمن به پزشک مراجعه کرده است. برای بیمار سونوگرافی شکم و تست IgG علیه هلیکوباکتر پیلوری انجام شده که ۴ برابر بیشتر از نرمال آزمایشگاه بوده است. سونوگرافی شکم نیز نرمال گزارش شده. با تشخیص گاستریت ناشی از عفونت هلیکوباکتر، مترونیدازول، آموکسی سیلین و امپرازول شروع شده است. چند هفته بعد از شروع درمان، شکم درد بیمار همچنان ادامه دارد. تست IgG مجدد چک شده و همچنان بالاست. جهت تصمیم گیری به شما ارجاع شده است.
- در رابطه با این بیمار چگونه تصمیم گیری و اقدام می کنید؟

Who should be Tested?

- Testing is not helpful unless it will alter the management of the disease
- It is recommended that testing for the presence of H pylori infection be performed in children with endoscopically diagnosed or radiographically definitive **duodenal ulcer**
- Also be performed in subjects with a documented **gastric ulcer**
- It is recommended that children with recurrent abdominal pain, in the absence of documented ulcer disease, not be tested for H pylori infection

Guidelines for the Management of H pylori

- **Recommendation 1.** The primary goal of clinical investigation of gastrointestinal symptoms is to determine the underlying cause of the symptoms and not solely the presence of H pylori infection.
 - In the absence of PUD herein defined as gastric or duodenal ulceration or erosions, eradication of H pylori infection is not expected to result in improvement of symptoms

Guidelines for the Management of H pylori

- **Recommendation 2.** If H pylori infection is an incidental finding at endoscopy, treatment may be considered after careful discussion of the risks and benefits of H pylori treatment with the patient/parents.
 - Potential risk of developing complications related to infection (PUD, gastric cancer) later in life
 - Potential risks of treatment (treatment failure, adverse effects of antibiotic use, or negative alterations to the gut microbiome)

Guidelines for the Management of H pylori

- **Recommendation 3.** Testing for H pylori be performed in children with gastric or duodenal PUD. If H pylori infection is identified then treatment should be administered and eradication confirmed.
 - Eradication of infection prevents ulcer recurrence
 - If erosions, ulcers, or scarring are visualized during upper endoscopy, biopsies should be taken to identify the presence of H pylori infection

Guidelines for the Management of H pylori

- **Recommendation 4.** We recommend against diagnostic testing for H pylori infection in children with functional abdominal pain disorders.
 - Children with recurrent abdominal pain without any alarm signs or symptoms most likely have functional pain independent of H pylori status

Guidelines for the Management of H pylori

- **Alarm Signs** include: persistent RUQ or RLQ pain, dysphagia, odynophagia, persistent vomiting, gastrointestinal blood loss, involuntary weight loss, deceleration of linear growth, delayed puberty, unexplained fever, and a family history of IBD, celiac disease, or PUD
- A positive noninvasive test may induce anxiety in children with functional pain or their parents with the consequence of referral for upper endoscopy, therefore, diagnostic testing for the infection should not be undertaken in these children

Guidelines for the Management of H pylori

- **Recommendation 5a.** We recommend against diagnostic testing for H pylori infection as part of the initial investigation in children with iron deficiency anemia (IDA)
- **Recommendation 5b.** We suggest that in children with refractory IDA in which other causes have been ruled out, testing for H pylori during upper endoscopy may be considered

Guidelines for the Management of H pylori

- Noninvasive testing for H pylori is not recommended as part of the initial investigation of IDA in children
- If upper endoscopy is clinically indicated in the management of IDA refractory to iron therapy, biopsies for the diagnosis of H pylori may be considered
- Noninvasive testing for H pylori in the case of refractory IDA is not recommended

Guidelines for the Management of H pylori

- **Recommendation 6.** Noninvasive diagnostic testing for H pylori infection may be considered when investigating causes of chronic ITP
 - If the noninvasive test is positive it has to be decided on an individual basis and depending on the platelet count whether an upper endoscopy is needed before eradication therapy
 - A weak recommendation for testing and treating for H pylori infection in the patient with chronic ITP was included in the guidelines



Guidelines for the Management of H pylori

- **Recommendation 7.** We recommend against diagnostic testing for H pylori infection when investigating causes of short stature

Guidelines for the Management of H pylori

- **Recommendation 8.** Before testing for H pylori, wait at least 2 weeks after stopping PPIs and 4 weeks after stopping antibiotics
 - If PPI cannot be discontinued for 2 weeks because of recurrence of symptoms, changing to an H2-receptor antagonist with discontinuation of the drug 2 days before testing may improve the sensitivity of the diagnostic test

Guidelines for the Management of H pylori

- **Recommendation 9.** The diagnosis of H pylori infection should be based on either: positive culture or H pylori gastritis on histopathology with at least 1 other positive biopsy-based test
 - The initial diagnosis of H pylori infection should not be based on noninvasive tests (13C-UBT, H pylori stool antigen test) or other noninvasive methods
 - A positive noninvasive test supports the diagnosis in cases in which positive histology is the only invasive test available

Guidelines for the Management of H pylori

- **Recommendation 10.** We recommend against antibody-based tests (immunoglobulin G [IgG], IgA) for H pylori in serum, whole blood, urine, and saliva in the clinical setting

Guidelines for the Management of H pylori

- **Recommendation 11a.** The outcome of anti-H pylori therapy be assessed at least 4 weeks after completion of therapy
- **Recommendation 11b.** One of the following tests be used to determine whether H pylori treatment was successful:
 - (1) The 13C-UBT
 - (2) A 2-step monoclonal stool H pylori antigen test

Guidelines for the Management of H pylori

- The relief of symptoms is not an indicator for successful treatment, therefore, all children treated for H pylori should be assessed for treatment success with a reliable test
- Endoscopy and biopsy-based tests to confirm eradication are rarely needed in pediatric patients with uncomplicated PUD
- Gastric and duodenal peptic ulcers have a low risk for relapse with clearance of the infection

Take Home Messages

1. The diagnosis of H pylori currently can be made reliably only by endoscopy with biopsies
2. Currently available commercial serologic tests are frequently unreliable for screening children
3. Current whole-blood, saliva, and urinary immunoassays are insufficiently sensitive or specific
4. Insufficient data are available in children to confirm the accuracy of the H pylori stool antigen test
5. The UBT has the promise to provide noninvasive and accurate diagnosis of H pylori infection; but currently, there is insufficient evidence that it can be used to reliably diagnose or exclude H pylori-associated diseases