POEMs

Patient-Oriented Evidence that Matters

We have selected three POEMs for August. The first provides support for what patients actually do rather than what we tell them to do and it saves Pharmac money. The second clarifies a little further the outcome for children who have had abnormal first trimester nuchal translucency measurements and the final POEM supports H. pylori eradication for long-term proton pump inhibitor users who have dyspepsia. Editor.

Clinical question

Do inhaled corticosteroids really have to be taken daily by patients with mild persistent asthma?

Bottom line

For patients with mild persistent asthma, symptoms and exacerbations can be controlled just as well using a combination of beclomethasone 250mcg plus albuterol 100mcg used as needed instead of daily. This approach reduces the amount of steroids given and may result in better compliance, as well. (LOE = 1b)

Reference

Papi A, Canonica GW, Maestrelli P, et al. for the BEST Study Group. Rescue use of beclometasone and albuterol in a single inhaler for mild asthma. N Engl J Med 2007; 356:2040–2052.

Study Design

Randomised controlled trial (double-blinded)

Funding

Industry

Allocation

Concealed

Setting

Outpatient (specialty)

Synopsis

For years we've been telling our patients with mild persistent asthma that they have to take their corticosteroid inhaler every day, not as needed. But is that really true?

These researchers identified 510 patients who were given a four-week course of beclometasone dipropionate 250mcg twice daily plus albuterol inhaler to be used as needed. Those with good control while using this regimen were then randomised to one of four groups: (1) continued beclomethasone 250mcg twice daily plus albuterol as needed, (2) beclomethasone 250mcg plus albuterol 100mcg twice daily plus albuterol as needed, (3) albuterol as needed only, and (4) beclomethasone 250mcg plus albuterol 100mcg to be used as needed only. Patients received placebo inhalers to maintain masking, and outcomes were assessed by researchers masked to treatment assignment. Of 466 who started the study, 393 completed the six-month study; dropouts were similar between groups. Half the patients were women and the mean age was 39 years. A variety of physiologic measures of lung function showed that the as-needed combination of steroid and beta-agonist was better than albuterol alone and as effective as the traditional combination of daily steroid and as needed beta-agonist. More important, patients using the steroid and beta-agonist combination only as needed had fewer exacerbations than the albuterol only group (0.74 per year vs 1.63 per year; $P < .001$) and a simliar number as the group taking beclomethasone daily with as-needed albuterol. In addition, patients using the combination of steroid and beta-agonist as needed used less total steroids than those taking them daily (18mg vs 78mg). The percentage of symptom-free days was also similar between the groups who took steroid plus beta-agonist as needed and those who took them daily.

* Patient-Oriented Evidence that Matters. See editorial (NZFP 2003; 30:150)

Clinical question

Does abnormal nuchal translucency always indicate an abnormal child?

Bottom line

In cases of abnormal first trimester nuchal translucency with normal karyotype and normal second trimester ultrasound, the risks of adverse neonatal outcome and developmental delay in childhood are not increased. Parents can be reassured in this situation. (LOE = 2c)

Reference

Senat MV, Bussieres L, Couderc S, et al. Long-term outcome of children born after a first-trimester measurement of nuchal tanslucency at the 99th percentil or greater with normal karyotype: A prospective study. Am J Obstet Gynecol 2007; 196:53e1–53e6.

Study Design

Case-control

Funding

Unknown/not stated

Setting

Outpatient (any)

Synopsis

Increased nuchal translucency thickness in the first trimester has been associated with aneuploidy, and measurements above the 95th percentile has been associated with other congenital defects, principally cardiac defects. This French study included 162 cases of children with history of nuchal translucency above the 99th percentile, normal karyotype, and normal anatomy by ultrasound at 22 to 24 weeks' gestation. Children were examined within two days after birth, at one, four and nine months, and at two years of age. The parents also completed the Ages and Stages Questionnaire at every examination starting with the four-month visit to detect early signs of developmental delay. Cases were compared with a control group of 370 term French children from a population-based cohort study. There were no differences between groups for congenital defects or developmental delay.

Clinical question

Can eradication of Helicobacter pylori decrease symptoms and proton pump inhibitor use in long-term users?

Bottom line

Identification and eradication of H. pylori in long-term users of proton pump inhibitors (PPIs) results in a small decrease in their use of PPIs over the following year and fewer return office visits. Dyspepsia symptoms were decreased; reflux symptoms were not. (LOE = 1b)

Reference

Raghunath AS, Hungin AP, Mason J, Jackson W. Helicobacter pylori eradication in long-term proton pump inhibitor users in primary care: a randomized trial. Aliment Pharmacol Ther 2007; 25:585–592.

Study Design

Randomised controlled trial (double-blinded)

Funding

Industry + govt

Allocation

Concealed

Setting

Outpatient (primary care)

Synopsis

The investigators performing this study evaluated patients identified from 13 primary care practices in England who used PPIs for at least 12 months. The patients stopped their PPI use for two weeks and underwent evaluation for H. pylori status; 28% were positive. These 184 patients were randomly assigned, using concealed allocation, to receive placebo or one-week triple therapy for H.pylori eradication. PPI use and office visits were monitored for 12 months, and dyspepsia and reflux symptoms were measured, along with quality of life, after 12 months. H. pylori was eradicated in 94% of patients. Over one year, PPI prescriptions were significantly reduced in the treated patients, from 9.2 to 7.4 prescriptions, whereas prescription rates remained the same in the placebo-treated patients. The decrease in prescriptions was higher for patients receiving full-dose PPI. On average, treated patients had one fewer visit over the year than untreated patients. Dyspepsia, but not reflux symptoms were lower in the treated patients. Quality of life was not affected by treatment.