Survey Questions

Asymptomatic adrenal suppression – Post-study survey

April 2013

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Children with adrenal suppression (AS) may be asymptomatic, have non-specific signs and symptoms or be critically ill (adrenal crisis). Identifying and treating asymptomatic patients *before* they develop symptoms may reduce morbidity in this population. Official guidelines for screening for AS have yet to be developed. Consequently, screening practices – as demonstrated in the pre-study survey – are highly variable.

Before and after a two-year CPSP surveillance study of *symptomatic* AS, participants were surveyed to assess their screening practices for, and recognition of, AS. Results of the one-time pre-study survey were published in the *CPSP 2010 Results*. The post-study survey aimed to evaluate current practices of participants and assess the educational impact of the two-year study. The one-time post-study survey was sent to 2465 CPSP participants in April 2013. The response rate was 21% (n=521), compared to 32% in the pre-study survey. The percentage of physicians who reported routinely screening patients on GCs for AS increased from 10% in the pre-study survey to 21%. The number of physicians who reported having a screening policy in their office/centre also increased (from 6% to 11%). These increases may be attributable to awareness generated by the surveillance study. However, there was little change in the percentage of physicians who had diagnosed a child/youth with asymptomatic AS in the preceding year (from 12% to 10%).

First morning cortisol was the most frequently used test in both the pre- and post-study surveys (74% and 82% respectively). However, the low-dose ACTH stimulation test was used more often in the post-study survey – 21% in the pre-study survey compared to 43% in the post-study survey – suggesting an improved understanding of how to diagnose AS. One hundred and forty-four (28%) respondents reported that they had changed their approach to managing patients on GCs for AS over the past two years. Changes included closer surveillance of growth (n=117), routine screening (n=52), change in office policy (n=12), and change in hospital policy (n=7). Sixty-seven (13%) of the total respondents reported that their screening practice for AS changed because of the CPSP study – 65 changed their practice for inhaled corticosteroids (ICS) and 43 for systemic GCs.

Results of the previous two-year surveillance study suggested that children treated on the high but common dose of 500 mcg/day of fluticasone or greater should be screened for AS. In the post-study survey, 484 respondents answered a question regarding screening threshold for ICS; 223 (46%) do not screen children receiving only ICS, 153 (32%) screen for doses ≥500 mcg/day of fluticasone (or equivalent), 71 (15%) screen for doses >500 mcg/day and 37 (8%) reported "other". A similar question in the one-time pre-study survey demonstrated that among the physicians who were screening patients taking ICS, >500 mcg/day was the most common threshold (n=47), followed by ≥500 mcg/day (n=32). The shift to the lower threshold over time (i.e., ≥500 mcg/day vs. >500 mcg/day) suggests improved awareness of the risks of AS.

Although screening for asymptomatic AS appears to have increased following the two-year study, the frequency of screening remains low compared with the frequency of children being treated with GCs. Development of a clinical practice guideline could increase awareness of asymptomatic AS among Canadian paediatricians and increase the identification of asymptomatic AS, before symptoms develop.

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