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PECULIARITIES OF NEURON-SPECIFIC ENOLASE CHANGES IN CHILDREN WITH HELICOBACTER PYLORI-ASSOCIATED CHRONIC GASTRODUODENITIS

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The aim of the study was to assess changes in the level of neuron-specific enolase (NSE) in children with chronic gastroduodenitis (CGD), taking into account the presence of *Helicobacter pylori* (HP) and the severity of the disease.

Materials and methods 73 children aged 8–15 years with CGD were examined. The first group included 30 children with CGD associated with the HP (HP+). In the II group – 43 children with CGD are not associated with HP (HP–). Groups I and II included children with superficial gastroduodenitis (SGD) and erosive gastroduodenitis (EGD). The control group (CG) consisted of 28 children I–II health groups. The level of NSE in blood serum was determined by the method of enzyme immunoassay.

Results The level of NSE in group I and II children exceeded the values of NSE in CG: 10.87 (9.9–12.3) µg/l; 11.24 (9.95–12.23) µg/l and 9.79 (8.49–10.90) µg/l, $p \leq 0.01$. In group I the largest value of NSE revealed by EGD HP+: 12.14 (11.24–12.27) µg/l in comparison with the level of NSE in children with SGD HP+: 10.07 (9.95–11.42) µg/l, $p \leq 0.01$. In group II, the value of NSE at the SGD HP–: 11.10 (10.50–12.34) µg/l exceeded the level of the NSE of children with EGD HP–: 10.49 (9.47–10.61) µg/l, $p \leq 0.01$. The level of NSE in patients with EGD HP+ higher values of the index EGD in HP–: 12.14 (11.24–12.27) µg/l and 10.49 (9.47–10.61) µg/l, $p \leq 0.01$. The high indices of NSE in children with SGD HP– compared to SGD HP+: 11.10 (10.5–12.34) µg/l and 10.07 (9.95–11.42) µg/l, $p \leq 0.05$.

Conclusion An increase in the level of NSE in serum in children with HCG outside Association with HP-infection was revealed. The opposite direction of changes in the NSE depending on the severity of the disease indicates the participation of the studied factor in the pathogenesis of CGD.

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EFFORT TO STRATIFY ACUTE RESPIRATORY DISTRESS CHILDREN FOR THE INITIATION OF HIGH FLOW NASAL CANNULA (HFNC) USAGE IN GENERAL PAEDIATRIC WARD

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Introduction High Flow Nasal Cannula (HFNC) is a form of non-invasive ventilatory support that involves delivery of oxygen with heated high flow of air. HFNC improves oxygenation and reduce minute ventilation requirements in patients with respiratory disease.

Our hospitals are tertiary hospitals that are utilising HFNC in general paediatric ward, and high usage leads to increased

cost. Pediatric Respiratory Severity Score (PRESS) and Paediatric Early Warning (PEW) scoring systems were used to stratify the use.

Objective To determine the feasibility of using PRESS and PEW scoring system for HFNC initiation.

Methodology A retrospective cohort study of 10 months from January 2017 till October 2017. HFNC use was based on the discretion of the attending Paediatricians in the general ward. Clinical outcomes were assessed based on responder or non-responder. Non-responder defined as children requiring intubation or non-invasive ventilation (NIV) within 6 hours of HFNC initiation.

Results Two hundred nineteen (219) patients met inclusion criteria, with 194 (89%) responded to HFNC. Twenty-five (25) non-responders; 24 were upgraded to NIV and 1 was intubated. Eighty-five percent scored moderate-severe on PRESS score with 82% responders, while 55% on PEW score with 84% responders. Forty-five percent scored mild on PEW score with mode score of 2.

Conclusion Both scoring systems are feasible to be used as initiation criteria for HFNC. PEW score ≥ 2 is a reasonable cut-off point for HFNC initiation.

GP1

CAN THE INCLUSION OF A SIMPLE WRITTEN PROMPT ENHANCE OUR DETECTION OF OTHER 'AT RISK' CHILDREN AT RISK OF CHILD SEXUAL ABUSE?

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Background Evaluation of an index case of child abuse necessitates risk assessment of other children who could be vulnerable to abuse from the same perpetrator/s.

Objective To determine the effectiveness of the addition of a prompt to the standard clinical proforma used for the assessment of new referrals to a child sexual assault service in terms of impact upon detection of other at risk children.

Participants and Setting All referrals to a Child and Adolescent Sexual Assault Treatment Service, Galway, West Ireland.

Methods Retrospective chart review of all children assessed between September 2016 and March 2017. Intervention initiated on September 1st 2017. Prospective chart review of all children assessed between September 2017 and March 2018. Chart reviews established whether risk to siblings/close child contacts of the index case had been adequately considered.

Results Comparing pre and post intervention groups, documentation of children at risk significantly increased from 70% to 96% ($p=0.0124$). Cases in which a letter was sent to social services regarding other 'at risk' children significantly increased from 50% to 92% ($p=0.0005$) 0.161) but this was not statistically significant.

Conclusions Introduction of a simple prompt had a significant positive impact upon clinicians' consideration of other 'at risk' children. We recommend that other services consider including a similar section in their own proforma documents.