

Abstract from Current Literatures

Pediatric upper gastrointestinal bleeding in children: etiology and treatment approaches.

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Objective: Upper gastrointestinal bleeding (UGB) is one of the most important and serious cause of emergency admission in childhood. The aim of the study was to evaluate the etiological factors and the treatment approaches in patients with UGB.

Methods: In this retrospective study, children with UGB admitted to emergency clinics of Istanbul Health Sciences University Kanuni Sultan Suleyman Research and Training Hospital, Istanbul Bakirkoy Sadi Konuk Research and Training Hospital and Diyarbakir Children's Hospital were evaluated between January 2014 and August 2017.

Results: Of the 198 children, 14.6% had non-steroid anti-inflammatory drug (NSAID) history, and 12.6% had chronic liver disease. We detected esophagitis, esophagus varices and peptic ulcer with upper gastrointestinal endoscopic evaluation (47%, 11.1%, 18.1%, respectively). *Helicobacter pylori* was found in 61.6% of patients. Endoscopic therapeutic procedures (band ligation therapy, sclerotherapy, and adrenaline injection) were applied in 11.1% of patients. Eighty-four (42.4%) patients were hospitalized, and erythrocyte transfusion (ET) was ordered in 29 (14.6%) patients.

Conclusion: Approximately in 20% of the pediatric patients, the source of gastrointestinal bleeding is the upper gastrointestinal system. The cause of UGB varies with age. Appropriate diagnostic and therapeutic approaches are very important for management and to reduce mortality. Keywords: Upper gastrointestinal bleeding, Etiology, Treatment, Child

Is vitamin D deficiency a risk factor for COVID 19 in children?

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Objective: Coronavirus disease 2019 (COVID 19) is a global health problem that can result in serious complications. The aim of this study was to investigate the prevalence and clinical importance of vitamin D deficiency in children with COVID 19.

Material and Methods: This study includes 40 patients who were diagnosed to have COVID 19 and hospitalized with the real time reverse transcription polymerase chain reaction method, 45 healthy matched control subjects with vitamin D levels. The age of admission, clinical and laboratory data, and 25 hydroxycholecalciferol (25 OHD) levels were recorded. Those with vitamin D levels which are below 20 ng/ml were determined as Group 1 and those with eH20 ng/ml as Group 2.

Results: Patients with COVID 19 had significantly lower vitamin D levels 13.14 ig/L (4.19–69.28) than did the controls 34.81 (3.8–77.42) ig/L ($p < .001$). Patients with COVID 19 also had significantly lower serum phosphorus (4.09 ± 0.73 vs. 5.06 ± 0.93 vs. (U/L) ($p < .001$)) values compared with the controls. The symptom of fever was significantly higher in COVID 19 patients who had deficient and insufficient vitamin D levels than in patients who had sufficient vitamin D levels ($p = .038$). There was a negative correlation found between fever symptom and vitamin D level ($r = H0.358$, $p = .023$).

Conclusion: This is the first to evaluate vitamin D levels and its relationship with clinical findings in pediatric patients with COVID 19. Our results suggest that vitamin D values may be associated with the occurrence and management of the COVID 19 disease by modulating the immunological mechanism to the virus in the pediatric population. KEYWORDS epidemiology

Reduction in pediatric growth hormone deficiency and increase in central precocious puberty diagnoses during COVID 19 pandemics.

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Background: While several studies have been published so far on the effect of COVID-19 pandemic on health care for non-COVID-19 diseases, to date no study evaluated the impact of the COVID-19 pandemic on the entire field of pediatric endocrinology. This study aimed to evaluate differences in pediatric

endocrine stimulation tests after the advent of COVID-19 pandemics.

Methods: Retrospective study with data collection for pediatric endocrine stimulation tests performed in 2019 and 2020 in a tertiary center.

Results: Overall, 251 tests were performed on 190 patients in 2020, compared to 278 tests on 206 patients in 2019 ("10% tests; "8% children evaluated). A significant reduction was found in tests to diagnose growth hormone deficiency (GHD) ("35%), while LHRH tests increased (+ 22%). A reduction of 30% in GHD diagnosis was observed. Central precocious puberty (CPP) diagnosis increased by 38% compared to 2019, mainly in females.

Conclusion: This study found a significant reduction of tests investigating GHD during COVID-19 pandemics. It also showed a clinically meaningful increase in cases of CPP in girls. These results suggest the need for families and pediatricians to monitor children's growth during isolation and enlighten new perspectives towards conditions associated with lockdown restrictions as increased screen time, social isolation, and children's anxiety as possible triggers of CPP.

Safety, Feasibility and Effectiveness of Pulse Methylprednisolone Therapy in Comparison with Intramuscular Adrenocorticotrophic Hormone in Children with West Syndrome

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Objective: To assess the feasibility, effectiveness, and safety of pulse methylprednisolone in comparison with intramuscular adrenocorticotrophic hormone (ACTH) therapy in children with West syndrome (WS).

Methods: This open-label, pilot study with a parallel-group assignment included 44 recently diagnosed children with WS. Methylprednisolone therapy was given as intravenous infusion at a dose of 30 mg/kg/d for five days followed by oral steroids 1 mg/kg gradually tapered over 5–6 wk. The efficacy outcomes included a cessation of epileptic spasms (as per caregiver reporting) and resolution of hypsarrhythmia on electroencephalogram; safety outcome was the frequency of various adverse effects.

Results: By day 14 of therapy, 6/18 (33.3%) children in the methylprednisolone group and 10/26 (38.5%) children in the ACTH group achieved cessation of epileptic spasms [group difference "5.2%; confidence interval (CI) -30.7 to 22.8; $p = 0.73$]. However, by six weeks of therapy, 4/18 (22.2%) children in the methylprednisolone group and 11/26 (42.3%) children in the ACTH group had cessation of epileptic spasms (group difference" 20.1%; CI -43.0 to 8.4; $p = 0.17$). Hypertension was more commonly observed in the ACTH group (10 children) than in the methylprednisolone group (2 children; $p = 0.046$). Pulse methylprednisolone therapy was relatively safe.

Conclusions: The study observed limited effectiveness of both ACTH and pulse methylprednisolone therapy, which may partially be due to preponderance of structural etiology and a long treatment lag. However, pulse methylprednisolone therapy appeared to be safe, tolerable, and feasible for management of WS.