

ABSTRACTS

Abstracts of the 2024 International Congress of the European Academy of Paediatrics (EAP) and the European Society for Paediatric Research (ESPR)

A new chapter for the congress of the European Academy of Paediatrics and the European Society for Paediatric Research

Dear Reader,

It is with great pride that we present the abstracts showcased at the 2024 international meeting of the European Academy of Paediatrics (EAP) and the European Society for Paediatric Research (ESPR).

At the same time, it is with a note of sadness that we share this was the final edition of the European Academy of Paediatric Societies (EAPS) Congress held under the joint leadership of the EAP and ESPR. "EAPS" has been registered as a trademark by a professional congress organiser, who now independently hosts an event under that title. This development occurred without the involvement/consent of the EAP or ESPR and does not reflect the joint vision and leadership that previously defined the EAPS Congress. Nevertheless, our collaboration continues with renewed energy and vision. We are delighted to announce the launch of a new chapter: the Congress of European Paediatric Academic Societies (CEPAS). The first edition of CEPAS will take place from 28 to 31 October 2026 in Lyon, France.

We warmly invite you to share your suggestions for scientific topics and submit your abstracts for this exciting new congress. Learn more at www.cepas.org!

Thank you once again for your valued participation. We look forward to welcoming you to CEPAS 2026 in Lyon.

Sincerely,

Prof Dr Dr Berthold V. Koletzko, President, EAP

Prof Dr Willem-Pieter de Boode, President, ESPR

Europe has achieved significant advancements in reducing child mortality, improving nutrition, health, and education. However, ongoing and overlapping crises and conflict have absorbed much of Europe's leaders' attention over recent years. Now, reduction in child mortality is reversing in some countries and stagnating in most with pronounced inequities by socio-economic groups. The prevalence of mental health conditions has doubled since the Covid-19 pandemic, affecting 1 in 4 adolescents. One in 3 primary school children are overweight or obese. The European Region also has the highest number of children and adolescents with type 1 diabetes. Five million children are at risk of developmental difficulties, with many of them identified too late for effective intervention. Children and adolescents are also affected by crises such as climate-related emergencies, war and widening inequalities. The foundation for preventing NCDs and promoting healthy aging can only be laid during the formative years. To address these issues, WHO is renewing its child and adolescent strategy. The new strategy is proposed to be based on five pillars: Increasing Investment in Children's and Adolescents' Health for Lifelong Benefits. Supporting Governments to Fulfill Duty of Care for and Protection of Every Child as Enshrined in the UN Convention of the Rights of the Child. Regulating against commercial harm to protect children. Realizing comprehensive child and adolescent health through effective multi-sectorial governance. Measuring progress and ensuring accountability through robust monitoring. WHO/Europe has embarked on a participatory process to finalize this strategy, integrating children's voices into policy-making and ensuring their rights are protected.

INVITED SPEAKERS

IS001/#86 | Who European Strategy for Child and Adolescent Health and Wellbeing

Natasha Azzopardi Muscat

WHO Regional office for Europe, Country Health Policies And Systems, Copenhagen, Denmark

IS002/#87 | Women in Paediatrics

Donna Ferriero

UCSF Weill Institute for Neurosciences, Neurology, San Francisco, United States of America

Women in Pediatrics Donna M Ferriero MD MS Is there a glass ceiling for women in Pediatrics? Is there a leaky pipeline? Are there remedies? We need to renovate our house to enable proper

for a post-discharge check-up 10 days later. The patient's clinical and biochemistry values were normal.

Conclusions: Although it is mostly seen in intensive care units and cardiac patients, there is a risk of developing hypoxic hepatitis in infants with gastroenteritis due to hemodynamic deterioration. In addition, the differential diagnosis of metabolic disease in infants should also be kept in mind.

EP472/#736 | Inflammatory Mediators and Regulatory Hormones in Children With Peptic Ulcer

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Background and Aims: To analyze the state of the profile of inflammatory mediators and regulatory hormones in children with various variants of the course of duodenal ulcer (DU).

Methods: 47 children aged 7–15 years with DU were examined. In 23 (48.9%) there was a newly diagnosed uncomplicated Hp+ DU, in 24 (51.1%) an unfavorable type of disease course was established with complications, frequent relapses of Hp- DU. The level of pro-inflammatory cytokines (IL-1; IL-2; IL-8) in the peripheral blood was determined by ELISA, gastrin (G) and somatostatin (ST) – by radioimmunological method, *Helicobacter pylori* (Hp) by histology.

Results: Changes in the cytokine profile were ambiguous in children with different variants of the course of DU. With a favorable course and timely repair of the ulcer, the level of IL-1 and IL-8 increased moderately in 54% of children, and the level of IL-2 increased slightly in 32% of patients. Variants of complicated, frequently recurrent DU were characterized by a significant and persistent increase (2–3 times) in the levels of predominantly IL-8 and IL-1 ($p < 0.01$). The study of the hormonal profile revealed varying degrees of hypergastrinemia, which was persistent and pronounced in recurrent and complicated DU. The CT level was predominantly in the normal range with a favorable course of DU. A significant ($p < 0.05$) decrease in the level of CT was detected in children with frequent relapses, mainly with HP negative DU (in 67% of patients).

Conclusions: Changes in cytokine and hormonal profiles are ambiguous in children with different variants of the course of DU.

EP473/#669 | Physical Development of Children With Metabolic and Inflammatory Diseases of the Biliary Tract

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Background and Aims: In the structure of biliary diseases in children increased the frequency of metabolic diseases of the biliary tract. Aims: to study the nature of the physical development

of children with metabolic and inflammatory diseases of the biliary tract.

Methods: A comprehensive survey of 198 children and adolescents 2–17 years (97 boys and 101 girls) with metabolic and inflammatory diseases of the biliary tract (MIDBT).

Results: Most often, body mass (BM) deficiency (18.2%), excessive BM (6.5%) and obesity (8.1%), low growth (7.1%) were determined. Disharmonious physical development (DPHD) is almost twice as often diagnosed in boys than in girls (62.6% vs. 32.7%, $p < 0,05$). The dependence between the character of the distribution function and the age of onset, which had gender characteristics. Regardless of the age of onset significant number of children were underweight. As for the delay of growth, the highest frequency of patients with low growth accounted for the manifestation of the disease in the period from 8 to 13 years. It should be noted that among boys younger group (1–7 years) and adolescents over 12 years, significantly more likely to diagnose disorders of body weight and delayed growth.

Conclusions: Individual analysis of anthropometric parameters in patients with MIDBT helped diagnose disharmonious physical development in 42.4% of patients. In the structure of physical development disorders predominate among girls deficiency and excess body weight. The highest percentage of patients with disharmonious physical development in the first year of the disease, and in patients who suffer from more than 5 years.

EP474/#656 | Long-Term Stress and the Functional State of the Liver in Children Affected by the War in Ukraine

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Background and Aims: Stressful situations and sudden disturbances in the diet and nature of nutrition in children can lead to the development of intrahepatic cholestasis, which is of a functional nature. Aims: to identify and analyze the condition of the liver in children after prolonged stress and malnutrition as a result of the war in Ukraine.

Methods: 60 children aged 5 to 11 years, who were in the occupied territories of Ukraine for 1 to 5 months and had serious eating disorders and post-traumatic stress disorder, were examined with abdominal ultrasound and liver function tests.

Results: All children complained of constant, low-intensity nausea not associated with food intake, and pain in the right hypochondrium, worsening after physical activity. On palpation, only 15 (25%) had moderate hepatomegaly. Ultrasound of the abdominal cavity revealed in 15 children (25%) corresponding changes in the liver parenchyma (increased echogenicity, attenuation of the liver echo), thickening of the bile ducts (18 children (30%), stagnant contents (suspension/sludge) of the gallbladder in 25 (42%) patients. However, almost all children (58 (96.7%)) had impaired liver function tests: a disproportionate increase in alkaline phosphatase (5–8 times) and gamma-glutamine transpeptidase (5–8 times) relative to a slight increase (1.5–2 times) alanine aminotransferase and direct bilirubin. (2-3 times). After

symptomatic treatment for three months, there was a positive trend in all children. We regarded these changes as hepatocellular cholestasis of a functional nature.

Conclusions: Stress and severe nutritional disorders in children lead to the development of intrahepatic cholestasis of a functional nature and require dynamic monitoring and timely correction.

EP475/#1490 | The Importance of Clinical Presentation in Celiac Disease: A Case Report

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Background and Aims: According to ESPGHAN guidelines, Celiac Disease (CD) diagnosis should be based on a combination of clinical history, serologic testing and duodenal biopsies. In some cases, the diagnosis can be challenging. We aim to show the importance of maintaining a high clinical suspicion and follow-up for the correct diagnosis in clinical practice.

Methods: We present one paediatric case of CD with negative initial screening for tecticular anti-transglutaminase antibodies (TGA-IGA).

Results: We present the case of a 13-months-old girl referred to outpatient clinic with failure-to-thrive with no other clinical signs or symptoms. Initial testing for CD with the combination of total serum IgA and TGA-IgA was negative. IgA class antibodies against deamidated gliadin peptide was positive and against endomysium negative. Due to clinical exacerbation during follow-up an esophagogastroduodenoscopy with duodenal biopsies was performed and results were consistent with celiac disease. A gluten-free diet was implemented with good response.

Conclusions: This case report shows the challenges faced in diagnosing CD in real life, highlighting the importance of follow-up, and valorisation of clinical symptoms and signs.

EP476/#1062 | Adjunctive Methotrexate in the Management of Anti-Infliximab Antibodies in Paediatric IBD

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Background and Aims: Anti-TNF therapy is a highly effective therapy for inflammatory bowel disease (IBD) but anti-drug antibodies (ADAs) limit its durability and effectiveness. The aim of this study was to investigate whether adding methotrexate co-immunosuppression following antibody development abrogates titre progression and averts secondary loss of response in children diagnosed with IBD.

Methods: We analysed the data of participants of the DOCHAS study of children with IBD who commenced on infliximab between January 2017 to December 2022. Outcomes including secondary loss of response, medication durability and ADA titres were compared between groups with and without adjunctive methotrexate therapy.

Results: Over the study's period, 649 patients were newly diagnosed with IBD, and 335 (52%) patients commenced infliximab. Of these, 143/335 (43%) developed ADAs. Adjunctive methotrexate was commenced in 38/335 (11%) patients: 29/38 for positive ADAs. Reduced ADA titres were seen in 17/29 (59%) (the reduction of ADAs was secondary to increase of infliximab dose in 3/17 (18%), 2/17 (12%) had infliximab reinduction, 4/17 (24%) shortening interval. By comparison, of the 113 patients with positive ADAs without adjunctive methotrexate, 27/113 (24%) infliximab discontinued, (14/113 (12%) lost infliximab response, 11/113 (10%) due to increasing ADAs and 2/113 (2%) for side effects). ADAs reduced in 38/113 (34%) (reduced spontaneously in 15/113 (13%), reduced in 8/113 (7%) after infliximab dose increases, 10/113 (9%) following re-induction of infliximab.

Conclusions: Anti-infliximab antibodies developed in nearly half of patients treated with infliximab within 2 years following a proactive therapeutic drug monitoring regimen. A modest benefit of adjunctive methotrexate in sustaining infliximab response was observed.

EP477/#2023 | The Characteristics of Gut Microbiome in Children With Infancy-Period Functional Gastrointestinal Disturbances

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Background and Aims: The aetiology and pathogenesis of functional gastrointestinal disturbances (FGID) are still poorly understood. However, the increased importance of the role of gut microbiome in FGID is being discussed in many types of research. The study aimed to uncover the composition of children's gut microbiome in relation to FGID.

Methods: A cross-sectional study has been performed at primary healthcare centres. Parents of children up to 18 months were asked to fill out a questionnaire and to bring the child's faecal sample. Further, DNA from the faecal samples was isolated and the composition of the infant gut microbiome was detected. Statistics: T-test, Mann-Whitney test. *p* value <0.05 was considered significant.

Results: Altogether 61 participants aged 1-18 months were enrolled. Out of them 41% (25/61) had regurgitation, 46% (28/61) colics and 15% (9/61) constipations in anamnesis. The median relative abundance of the following taxa was higher in children with regurgitation: *Enterobacter bugandensis*, *Faecalibacterium prausnitzii*, *Klebsiella variicola*, *Staphylococcus hyicus* and *Streptococcus lutetie*. But in children with colics: *Bacteroides fragilis*, *Bifidobacterium angulatum* and *B. pullorum*, *Blautia wexlerae*, *Clostridium saccharobutylicum*, *Faecalibacterium*