afebrile seizures in children. Recent reports have shown that after the introduction of RV vaccine the incidence of RV-associated CwG decreased.

Aim To evaluate the demographic, electroclinical characteristics and outcome of CwG in children hospitalized in 6 Croatian centers in the period from 2008 to 2018.

This is a multicenter prospective study that included 40 patients hospitalized for CwG (male to female ratio 25:15). We collected medical records including data on gender, personal, family history of epileptic seizures, age on the time of first seizure, clinical type, duration and frequency of seizures, postictal/interictal electroencephalographic (EEG) features, antiepileptic therapy and the results of laboratory analysis (including stool specimens for virus antigens and bacterial stool specimen culture) and brain imaging. Patients follow up was performed in six-month intervals during the first two years and later at intervals of 12-18 months (median time 44.5 months). Seizure types were classified using most current revised ILAE terminology.

Statistical analysis was performed using the SPSS Windows version 15.0 program.

The median age of children at the time of CwG onset was 15.5 months (range: 1 month to 6 years). Rotavirus was the most common cause of diarrhea (85%).

Seizures most frequently occurred (45%) on the third day of the gastrointestinal symptoms. Generalized seizures (90%) were the most common clinical presentation. In a half of patients, the seizures came in clusters.

The attacks usually lasted for less than five minutes (85%). In about half of the patient's seizures ceased spontaneously and usually lasted less than five minutes (85%). Abnormal EEG was reported in 6 of 40 patients with CwG (15%). Long-term antiepileptic therapy (phenobarbitone and valproic acid) was prescribed in 12/40 patients (30%) for 1-24 months. During the follow-up period of 37 children with CwG, two children (5.4%) had recurrence of CwG, two patients had febrile seizures and two children developed epilepsy.

Afebrile CwG represent a defined clinical condition with good prognosis and normal psychomotor development in most children. In a small number of cases, the risk of recurrence of CwG may exist, with the risk of the onset of febrile seizures and the development of epilepsy. Considering RV as the most common causative agent of diarrhea associated with convulsions, universal vaccination with RV vaccines should reduce the incidence of morbidity from RV disease and consequently reduce the occurrence of its complications – CwG.

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AVAILABILITY AND HEALTH CARE UTILIZATION IN THE PRE-SCHOOL CHILDREN'S HEALTH SERVICE IN THE CURATIVE-CARE DURING THE COVID-19 EPIDEMIC

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Objectives To determine the impact of the COVID-19 epidemic on the availability and health care utilization in the pre-school children's health service in Croatia.

Methods We used data from pre-school children's health service, where about 90% of preschool children receive health care, obtained through Central Health Information System of the Republic of Croatia. Number of contacts with health care

providers, examinations and counselling, as well as number of issued referrals and prescriptions during 2019 and 2020, for children up to six years of age, in curative-care, were analyzed.

Results During 2020, 232,583 children sought health care in pre-school children's health service, which is a decrease of 2.7% in regard to 2019, when 239,148 children were registered. The number of contacts with health care, which includes visits, examinations, telecommunications etc., also decreased, by 16.6% (2020: 1,977,417; 2019: 2,372,249). In curative-care examinations a decrease of 42.0% was recorded (2020: 704,584; 2019: 1,214,178), but an increase of 12.0% was recorded in curative- counselling (2020: 1,016,716; 2019: 907,894), with 80% increase in curative-counseling by e-mail and/or telephone.

The number of issued referrals and prescriptions also shows a decrease in 2020 compared to 2019. During 2020, 410,933 referrals were issued, and in 2019 530,626 referrals, which is a decrease of 22.6%, however, the share of different types of referrals remained almost unchanged in both years, and the share of referrals to the hospital emergency departments did not increase either.

During 2019, 1,181,889 prescriptions were prescribed, with the highest share of beta-lactam penicillins – 13.3%. During 2020, 923,002 prescriptions were prescribed, a decrease of 21.9%, with the largest share of the subgroup of vitamins – 11.4%.

Conclusion By declaring the COVID-19 epidemic in Croatia, the Minister of Health, in order to protect the health of health-care workers and patients, recommended the maximum possible reduction of patients' visits to medical practices and performing only urgent examinations and procedures during the epidemic, while increasing the availability of telecommunication contacts with patients. This analysis shows that in 2020, the use of health care in the pre-school children's health service also decreased, but it was not significant. It is important to emphasize that although the number of examinations of sick children has decreased, the number of curative counselling has increased, especially those provided by phone and e-mail, which indicates a rapid response of pediatricians to the new situation and greater use of telecommunication channels in regular communication with parents which helped in maintaining the availability of health care system.

The decrease in the number of prescriptions can be explained by the closure of preschools in the spring of 2020 and the subsequent lower frequency of contact among children, but requires more detailed morbidity analyzes and the analyzes of possible SARS-CoV-2 impact on other pathogens characteristic for that age.

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A CHILD WITH DENSE DEPOSIT DISEASE AND DECREASED CLASSICAL PATHWAY ACTIVITY

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C3 glomerulopathy (C3G) is a rare kidney disease caused by abnormal control of complement activation and includes dense deposit disease (DDD) and C3 glomerulonephritis. DDD

results in predominant C3 without significant Ig deposition on immunofluorescence microscopy and characteristic sausage-shaped, wavy deposits by electron microscopy within the glomerulus. Disease clinically presents as proteinuria, hematuria, acute nephritis or nephrotic syndrome and acute kidney failure.

We are presenting an 8 years old boy that was brought to the clinic because of macroscopic hematuria. At initial presentation he had high blood pressure and periorbital edema. Urinalysis revealed numerous erythrocytes, proteinuria and presence of casts in the urine. Creatinine and urea concentration was elevated with low serum protein and albumin. No pleural or pericardial effusion was found. Urine culture was sterile and urinary tract ultrasound did not show anatomical anomalies or urolithiasis. He had proteinuria of 1,69 g/24h (74,2 mg/m²/h) and albuminuria of 1096 mg/24h. Glomerular hematuria was confirmed with the finding of 100% dysmorphic erythrocytes in the urinary sediment. Serum C3 concentration was low with normal C4. In accordance with anamnestic data on febrile sore throat 2 weeks prior to hospitalization, the antistreptolysin titre was slightly elevated. Immunological screening excluded lupus nephritis (negative ANA and ANCA), and serological examinations excluded hepatitis C and B. The patient was treated with oral antimicrobial course, furosemide and amlodipine, regulated diet. Repeated serum creatinine and urea concentrations were being improved and lastly were normalized during outpatient monitoring. Constant recovery of proteinuria and albuminuria was being observed and microscopic hematuria resolved after 4 months. Low C3 concentration persisted for another 2 months. Renal biopsy revealed focal endocapillary proliferative glomerulonephritis (GN) and GN with the dominant C3 finding on the light and immunofluorescence microscopy that may suits post-infective GN as well as C3 glomerulopathy. Electron microscopy showed a finding which is in accordance with DDD. Additional testing revealed decreased classical (43 CH50/ml; ref. range 48–103 CH50/ml) and deficient alternative (3%; ref. range 70–125%) pathway activity as well as slightly positive C3NeF, supporting the diagnosis of DDD. Genetic analysis revealed a polymorphism of the complement factor H gene with an increased risk of developing DDD. The child was fully recovered after supportive therapy. After a follow-up period of 2 years patient remained asymptomatic with normal kidney function. Given the poor prognosis of the disease, the proper approach to such specific glomerulopathy is important to avoid or at least to slow the progression to end-stage renal disease.

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TOXIC ALVEOLAR CELL INJURY IN YOUNG SMOKER

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Introduction Almost 2,500 children under the age of 18 burn their first cigarette every day, more than 400 of them will become active smokers (1), and half will die from the effects of smoking (2). Nicotine from cigarette smoke, as well as marijuana smoke (THC), consists of toxic mixtures of gases and particulates known to have adverse effects on the lungs (3,4). In this case report, we present a 15-year-old young man with hemoptysis caused by toxic alveolar cell injury resulting

from overexposure to tobacco smoke in combination with marijuana consumption.

Case Report A young man, aged 15, is admitted to our clinic due to occasional bloody cough during last couple of months. He was without known previous diseases, has been properly vaccinated and has not been in contact with tuberculosis (TB). He is an active athlete, did not lose weight, was not febrile lately.

Also, he is active smoker (up to 5 cig/day). At admission he was at good general condition with physical status without any abnormalities, including neat BCG scar. The laboratory work and chest radiography that was done didn't show any significant abnormalities. Additional exams (allergological, pulmonary, immunological, rheumatological, ENT) were uninformative too. Since the diagnostic work-up did not find the cause of hemoptysis, bronchoscopy was performed showing no specific macroscopic finding. Finally, a bronchoalveolar lavage (BAL) that was taken for cytologic analysis revealed toxic alveolar cell injury causing alveolar hemorrhage that was clinically manifested as hemoptysis. When confronted with the findings, the patient subsequently told us that he had been smoking excessively (>40 cig/day plus occasionally smoked marijuana) two weeks before the onset of symptoms, leading us to conclude that the problems were most likely caused by smoking a combination of tobacco and marijuana. The patient was advised to strictly avoid both active and passive smoking after which hemoptysis did not recur, which was an indirect confirmation of our assumption that smoking was a major cause of toxic alveolar cell injury.

Conclusion In addition to the most commonly known causes of hemoptysis in children with respiratory infections, aspirated foreign bodies and bronchiectasis, other rare causes should be kept in mind. To confirm toxic alveolar damage, the method of choice is bronchoscopy with cytological analysis of bronchoalveolar lavage (BAL). Also, young people need to be educated and informed about the dangers of smoking and to draw attention to the consequences of smoking.

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WHEN THE RESULT OF ANCILLARY TEST DOES NOT SUPPORT NEUROLOGICAL CRITERIA OF BRAIN DEATH – A CASE OF A 3-YEAR OLD GIRL WITH HEAD TRAUMA

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Brain death occurs when a person has an irreversible brain injury causing total cessation of cerebral and brainstem function, different from coma or persistent vegetative state. The diagnosis of brain death is made clinically with different practices for need of confirmation with ancillary test in different countries.

Here we present a case of a 3-year old girl that was admitted to the emergency room after a fall with a Glasgow coma scale score 3 but still breathing spontaneously. She underwent head and cervical spine computed tomography (CT) that showed smaller bilateral frontotemporoparietal subdural hematoma and subarachnoid haemorrhage. After a neurosurgical consultation she was initially treated conservatively. About three hours later her condition profusely deteriorated with apnoea, hemodynamic instability and profound anaemia. Second CT scan showed oedema and decompression craniotomy was indicated. 72 hours after the trauma the patient was