

with some ANAs still detectable.

Cryptogenic stroke is a diagnosis that is reached by excluding known causes. In our case, the diagnosis was made in accordance with standard guidelines. The physical examination done upon admission revealed only speech impairment. Laboratory diagnostics showed an increase in segmented neutrophils (neutrophilia), a decrease in lymphocytes (lymphopenia), elevated levels of D-dimer, and positive test results for ANA screen Ig (A, G, M). The MRI revealed lesions in both the insula and parietal lobe, while the CT scan showed a subcortical hypodense area with unclear brain contours in the left parietal lobe

Conclusion. Our case demonstrates that autoimmune antibody formation, specifically antinuclear antibodies (ANAs), can cause vasculopathy, leading to thrombus formation and stroke. It suggests a potential link between autoimmune antibody formation and stroke in COVID-19 patients.

COTININE AS AN OBJECTIVE CRITERION OF SMOKING IN CHILDREN WITH ARTERIAL HYPERTENSION

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Introduction. Smoking is one of the leading controllable risk factors for cardiovascular disease. Currently, the high prevalence of smoking among young people is of particular concern. Determination of nicotine metabolites (cotinine) in urine is an effective method for early detection and monitoring of smoking in children and adolescents.

Cotinine is an alkaloid found in tobacco and is also the predominant metabolite of nicotine, typically used as a biomarker for exposure to tobacco smoke.

The formation of cotinine is the leading link in the biochemical transformation of nicotine, as a result of which about 70-80% of nicotine is converted into cotinine. A small part of cotinine (10-15%) is excreted unchanged from the body in the urine, the rest (40-60%) is converted into its main metabolites (trans-3'-hydroxycotinine and cotinine glucuronide).

While nicotine has a relatively short half-life of about 2 hours, cotinine, a principal metabolite of nicotine, has a half-life of approximately 20 hours, and is a specific and sensitive marker for determining exposure to tobacco.

Urine testing is a common non-invasive method of testing for the presence of cotinine due to its ease of use and low cost.

It should be noted that the concentration of cotinine in urine is 4-6 times higher than its concentration in blood or saliva, and is also less subject to daily

fluctuations, which allows urine testing to be considered the most sensitive method for the qualitative and quantitative determination of cotinine.

Aim of the study. To provide an objective assessment of smoking using a qualitative determination of cotinine in urine in children.

Materials and methods. This study is aimed to objectively assess smoking in children via qualitative urine cotinine determination. 110 urine samples from children aged 14-18 were analyzed: 50 with arterial hypertension (Group 1), 30 with high-normal blood pressure (HNBP, Group 2), and 30 healthy controls (Group 3). Prior to urinalysis, a questionnaire assessed hypertension risk factors. Urine cotinine was determined using «ImmunoChrom-KOTININE-Express» test strips (200 ng/ml sensitivity). Statistica was used for data analysis.

Results and discussion. The questionnaire data indicated smoking as a more prevalent risk factor in hypertensive/HNBP groups vs. controls ($p=0.01$, respectively). Objective cotinine testing revealed positive results in 9 hypertensive children (17.7%) and 5 with HNBP (16.7%).

Combining cotinine test results with the questionnaire data showed 14 participants self-reported active smoking.

Conclusion. This study supports the implementation of rapid cotinine testing as a routine diagnostic tool in pediatric settings for the objective assessment of tobacco smoke exposure, whether active or passive. Its superiority over self-reported smoking history makes it particularly useful for identifying children with episodes of high blood pressure who may be at risk.

Early identification through cotinine testing allows for the creation of targeted interventions aimed at eliminating this modifiable risk factor.

ASSESSMENT OF KIDNEY FUNCTION IN NEONATES WITH CONGENITAL PNEUMONIA

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Introduction. Congenital pneumonia, an inflammatory pulmonary process acquired in utero or during delivery from the post-natal environment, is a major cause of neonatal morbidity and mortality globally. Out of many risk factors, prematurity and low birth weight are two major risk factors for congenital pneumonia, which often exacerbates the disease, and it can be complicated by impaired renal function.

Despite the importance of kidney function in neonatal infections, there is relative paucity of research specifically addressing the spectrum of renal involvement in neonates with congenital pneumonia especially in premature and low birth weight neonates.

Aim of the study. This research paper aims to provide an assessment of kidney function in neonates diagnosed with congenital pneumonia focused on