LATE-TYPE VITAMIN K DEFICIENCY BLEEDING: EXPERIENCE FROM 14 PATIENTS

E.K. Redko - associate Professor,
Larry Samuel Oinkepreys, Nwando Amakambu Elsy –students
Sumy State University, Department of Pediatrics with Medical Genetics

Vitamin K deficiency bleeding (VKDB) is defined as bleeding due to in adequate activities of VK-dependent coagulation factors (II,VI,IX and X), correctable by VK replacement. Deficiency of vitamin K predisposes to early, classic, or late vitamin K deficiency bleeding , of which late VKDB may be associated with serious and life-threatening intracranial bleeding. Late VKDB is characterized with intracranial bleeding in infants aged 1-4 months due to severe vitamin K deficiency, occurring primarily in exclusively breast-fed infants.

MATERIALS AND METHODS. We presented 14 cases of late VKDB, which were evaluated at Sumy region children's clinical hospital between January 2011 and Junuary 2012. None of the infants were not received a preventive dose of vitamin K after birth. Diagnostic criteria of VKDB are as follows – in a bleeding infant prolonged prothrombin time (PT) together with normal fibrinogen level and normal platelet count is highly suggestive of VKDB. Diagnosis of intracranial hemorrhages was performed on the basis of medical history, clinical data and ultrasound studies. The dead children intracranial hemorrhages were confirmed at autopsy.

RESULTS. Signs and symptoms of the patients were bleeding from the mucous membranes of the mouth, skin in places injections and ecchymosis in 14 ((100%) babies; jaundice in 7 (50%) cases; bulging fontanels in 10 (71%) babies; irritabilities in 7 - (50%); convulsions in 6 - (43%). Intracranial hemorrhage in 14 (100%) patients has been observed. The hemorrhage was intracerebral in 1 (7%) case, only subarachnoid in 8 (57%), intraventricular in 1 (7%), intracerebral and subdural in 1 (7%), subdural and subarachnoid in 2 (14%), and combination of intracerebral, subarachnoid, and intraventricular in 1 (7%); and the mortality rate was 78,6% - 11 babies.

CONCLUSION.Although late VKDB leads to significant morbidity and mortality, it can be avoided by providing vitamin K prophylaxis to all newborns. Administration of vitamin K (1 mg) at birth can prevent intracranial bleeding and other hemorrhagic manifestations.

Актуальні питання теоретичної та клінічної медицини : збірник тез доповідей Міжнародної науково-практичної конференції студентів та молодих вчених, м. Суми, 10-12 квітня 2013 р. / Відп. за вип. М.В. Погорєлов. — Суми : СумДУ, 2013. — С. 146.