

technology, the Apgar score remains the best tool for the identification of newly born infants in need for cardiopulmonary resuscitation.

Aim of the study. To evaluate if the Apgar score remains pertinent in contemporary practice after more than 60 years of wide use, and to assess the value of the Apgar score in predicting infant survival, expanding from the neonatal to the post-neonatal period.

Material and methods. A retrospective study performed by analysis of medical charts (n=116) of all live newborns hospitalized in the Neonatal Intensive Care Unit from Neonatology I Clinic of Târgu Mureş County Clinical Emergency Hospital between January-December, with data up to 28 days of life in reference to weight, Apgar score, survival and cause of mortality. Cases were analyzed by the Fisher exact test ($p < 0.05$).

Results. In 116 births, there were 20 deaths, 65% during the first week, 35% during the first day of life and 25% of them with Apgar < 6 in the 1st minute. In the group with 1,000-2,000 g weight, the association with Apgar < 4 in the 1st minute with mortality was four-fold greater than in the $>2,999$ g weight group. Among newborns with Apgar 8-10, the rate of mortality and low weight was not significant statistically compared to newborns of the group over 2500 grams weight [OR=1,12; 95%IC=0,11-11,37]; Severe respiratory distress syndrome and prematurity were associated with early neonatal death; malformations and perinatal hypoxia to late mortality.

Conclusions. The Apgar score proved linked to factors both epidemiological and related to attention given to the birth and neonatal mortality and was associated with extremely low birth weight.

Key words: Apgar score, neonatal, mortality

DEPARTMENT OF INFECTIOUS DISEASES

73. THE INCIDENCE OF VARICELLA SPECIFIC AND NONSPECIFIC COMPLICATIONS AMONG CHILDREN

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Introduction. Initial infection with Varicella Zoster Virus (VZV) results in chickenpox (varicella), a contagious rash illness typically occurring among children aged 1–10 years. VZV has the potential to cause disseminated infection in immune compromised individuals. There are two types of complications in varicella disease: bacterial superinfections and neurological complications that are quite rare.

Aim of the study. To evaluate the incidence, clinical manifestations and the outcomes of specific and nonspecific secondary complications among children with varicella.

Materials and methods. This is a retrospective study on 81 patients aged between 6 months and 17 years with neurological complications and bacterial superinfections related to varicella, recorded between 2016 and 2017.

Results. In 61 % of children, varicella occurred before the age of 3, with a peak incidence in winter (39%) and autumn (30%); 72% of children were hospitalized within 4 days. The most common form of varicella was the medium one (69%) and 31% of children had the severe form. Out of 81 patients that had chickenpox, 47% of them had complications. The most frequent varicella complications were: bacterial superinfection of skin caused by *St. aureus* and *Streptococcus pyogenes* (9.8%), bronchitis (6.17%), otitis media (4.9%), tonsillitis (6.17%). Only in 3.7% of children the central nervous system was affected (acute cerebellar ataxia). Clinical manifestations of varicella related neurological complication were: ataxia (3 cases),

vomiting and headaches (3), fever and seizures (3), shivers (2) and dizziness with slurred speech (1). Concomitant diseases that influenced the evolution of varicella were: anemia (10%), allergic contact dermatitis (6%), toxic encephalopathy (20%) and intestinal dismicrobism (7%). The hospital physicians prescribed antibiotics in 71 % of cases (aminopenicillins, cephalosporin II-III g) and 60 % of patients used acyclovir therapy.

Conclusions. The incidence of specific and non-specific secondary varicella complications in hospitalized patients was high (47%). The outcome of varicella complications was favorable in immunocompetent patients without apparent long-term sequelae. A decrease in the morbidity of varicella complications will be possible only if there's appropriate vaccination coverage.

Key words: varicella, bacterial superinfections, complications, children

74. ROTAVIRAL GENOTYPE IN ACUTE INTESTINAL INFECTION IN SENTINEL SURVEILLANCE OF INFANTS FROM REPUBLIC OF MOLDOVA

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Introduction. The implementation of sentinel surveillance of infants with rotavirus infection in 2008 in the Republic of Moldova has demonstrated a high rate of this infection. These results were used as an argument for vaccination against rotavirus inclusion in the National Immunization Program.

Aim of the study. To assess the aspects of clinical evolution, molecular and epidemiological peculiarities of rotavirus infection in children.

Materials and methods. The study included infants with acute diarrheal disease from sentinel surveillance (2011-2015) of the Department of Pediatrics. 95 patients with acute diarrheal disease were included in the standard case study. Biological material was examined for rotavirus infection using ELISA serological reaction and genotyping in PCR.

Results. The rotavirus infection has a high prevalence during the cold period of the year (January-March). Children's age varied from 1 to 12 months, with an average of 7.1 months, male children (54.8%) prevailing over females (45.2%).

Etiologically, intestinal monoinfection was predominant in the first study group (67.3% of children) compared to group II, where the viral monoinfection rate was 2 times lower. Higher hospitalization duration, more severe dehydration (3%), severe respiratory disease (pneumonia, bronchitis, 21%) were higher in study group II vs group I. Bacterial infection associated with acute diarrheal disease group II had a rate of 20.5% with identification of *Proteus mirabilis*, *Klebsiella pneumoniae*, *Staphylococcus aureus*, *Escherichia coli*, *Proteus vulgaris*, and *Providencia mixofaciens*. In study group bacterial association was sporadic. All children from the study group were examined for rotavirus infection and the most common genotypes found were G4, G2 and G9. The genotypes G2, G3, G4, and G9 are present in the Rotarix vaccine, which also provides vaccine efficacy in the country.

Conclusions. Rotavirus infection is more common in infants older than 6 months (53.6%) with male predominance (54.8%). Dehydration syndrome and association of more severe respiratory pathology is noted in children with viral-bacterial infection. Genotypes G4, G2 and G9 are more common in Republic of Moldova. Vaccination against rotaviral infection provides good immunity and decreases the morbidity by acute diarrheal disease in infants.

Key words: diarrhea, rotavirus, children.

DEPARTMENT OF FAMILY MEDICINE