Anxiety is an emotion or feeling of uneasiness, fear and worry that can be experienced by people regardless of age, gender and ethnicity. It can be caused due to several factors and symptoms of anxiety vary according to each individual. Symptoms of anxiety can include psychological as well as physical symptoms. The article reviews the correlation between mild anxiety, mild mental stress, and tension in the levator scapulae muscle.

Aim of the study. 1.To investigate the correlation between mild anxiety, mild mental stress, and tension in the shoulder blade lifting muscle. 2.Analyze the gender differences in the results obtained. 3.Compare the results obtained from international students and local students.

Materials and methods. The study was conducted among foreign and local 5^{th}-and 6^{th}-year students of Grodno State Medical University. The study involved 30 volunteers, of which: males – 19, females – 11. The study was conducted by palpation of the shoulder blade lifting muscle.

Two parameters were evaluated: muscle tension, muscle soreness.

Results and discussion. The study showed that the tension of the shoulder blade lifting muscle was detected in 28 students, which is 93.3% of cases.

No tension of this muscle was detected in 2 students (6.7% of cases).

In the group of international students, tension in the shoulder-lifting muscle was observed in 16 people (53.6% of cases). There are 14 people in the group of local students (46.4% of cases). It was found out that the left side shoulder blade muscle tension was more common than the right side in both genders in both local and foreign student groups and the frequency of detection of tension was higher in females comparatively to males.

Conclusion. 1.Mild anxiety and mild stress on a physical level are manifested by tension in the shoulder blade lifting muscle. 2.This pattern is noted by both international students and local students. 3.In females, tense muscles of the shoulder blade are detected more often than in males, both in foreign and local student groups.

Based on the results obtained, we can assume that females are more anxious than males. We can assume that females' increased anxiety will correlate with their higher academic performance.

INDICATORS OF THE RETICULOCYTE HEMOGLOBIN EQUIVALENT IN PREMATURE NEWBORNS OF THE GRODNO REGION

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Introduction. Preterm infants are at a higher risk of developing iron deficiency anemia. Reticulocytes develop from erythroblasts following

hemoglobin synthesis and transform into mature red blood cells in 1-2 days upon entering the peripheral blood. Therefore, the reticulocyte hemoglobin equivalent (Ret-He) is a representation of instantaneous hemoglobin synthesis. This parameter allows the early diagnosis of iron deficiency anemia and even the early restorative effects of iron therapy. Ret-He is the fastest way to identify changes in the current iron supply and also the quality of the cells.

Aim of the study. To analyze data from the anamnesis, clinical picture, laboratory (the level of Ret-He content in capillary blood) and instrumental tests on admission of pre-mature infants.

Materials and methods. A retrospective analysis of 67 case reports of pre-term babies that were admitted to the Grodno Regional Children's Hospital during the period of January 2024 to November 2024 was studied. Statistical analysis was carried out using the application package "STATISTICA 10.0" and "EXCEL".

Results and discussion. According to the analysis of the case reports, 47% of the babies studied were boys, while the remaining 53% were girls. The proportions of the modes of delivery are as listed; c-section 60 (89.6%), vaginal delivery 7 (10.4%). The average parameters at birth of the babies were as follows: birth length 45 [41;47] cm, birth weight – 1950 [1420;2410] g, head circumference 31 [28;32] cm. The gestational age of the pre-term newborns was 33 [30;36] weeks. Obstetric history data showed the following: threatened miscarriages were diagnosed in 22 (32.8%) cases, pre-eclampsia in 11 (16.4%), acute respiratory diseases in 22 (32.8%), other diseases in 62 (92.5%) cases. A total of 24 (35.8%) mothers had anemia. The total number of babies receiving only breast milk – 16 (23.9%), receiving only formula 28 (41.8%) and receiving both expressed breast milk and formula 23 (34.3%).

According to clinical manifestations congenital infection was established in 53 (79.1%) pre-term newborns, respiratory distress syndrome in 48 (71.6%), central nervous system depression syndrome in 29 (43.3%), intrauterine hypoxia in 19 (28.4%), heart failure in 6 (9%). According to the ultrasound investigations there were 19 babies (28.4%) recorded with the widening of the posterior horns of lateral ventricles on the sagittal plane. Total of 23 babies were recorded with signs of brain cysts 17 (25.4%) choroid plexus cysts and 6 (9%) of subependymal cysts were visualized. 30 of the total babies (44.8%) had signs of immaturity of the cerebral structures. The echocardiographic studies of the babies indicate that the number of babies with ventricular septal defect (VSD) was 5 (7.5%), with atrial septal defect (ASD) 27 (40.3%). On the lung fields of x-rays of the observed babies 12 (17.9%) had signs of pneumonia.

Upon admission to the hospital according to the laboratory studies in 12 premature babies the level of Ret-He was determined in complete blood count at the age of 6 (4.0;8.0) days and was equal: 33.6 [32.15;35.15] pg which corresponded to normal values in the first weeks of life. Reference values for Ret-He in premature infants are 27-34 pg.

Conclusion. At the time of admission to the hospital the level of Ret-He in premature infants corresponded to the age standards, which requires definition in dynamics to identify early diagnosis of iron deficiency in premature infants.