

Results. Clinical and radiological results in the first postoperative month were the following: in both cases of porcine peritoneum use the relapse of the defect occurred and the animals died at the 58th and 60th postoperative day. Morphopathological examination detected the presence of a diaphragmatic defect in the absence of partial graft, immature tissue being found at the edges of the defect, circumscribed by the plate or the overlap line wave. The animals of the 2nd study group have survived. The radiological examination performed on the 15th postoperative day showed a normal configuration of the newly formed hemidiaphragm; on the 60th postoperative day the normal configuration of the neohemidiaphragm was maintained; on the 90th postoperative day a moderate eventration of the hemidiaphragm has occurred – morphopathological examinations revealed that the tendinous region of the hemidiaphragm was subjected to very thin reconstruction with a transparent and semi-transparent aspect, microgranulated and in plateaus to the intransparent albuminous predominant area.

Conclusions. The preliminary results suggest that decellularized porcine peritoneum grafts are characterized by a lower biosensitivity compared to porcine pericardium, which exhibit acceptable biomechanical properties for the reconstruction of diaphragmatic defects, requiring additional experimental studies to adjust the bioresistance, stiffness and elasticity parameters.

Key words: decellularized grafts, experimental reconstruction

70. SCREENING THE C677T POLYMORPHISM OF THE MTHFR GENE IN ASSESSING DISEASE SEVERITY AND RESPONSE TO METHOTREXATE TREATMENT IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS

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Introduction. Existing data regarding the association of the mutation of methylenetetrahydrofolate reductase (MTHFR) gene with methotrexate (MTX) treatment efficacy and side effects in patients with juvenile idiopathic arthritis (JIA) is still contradictory. Therefore, genetic studies of the role of this mutation are necessary in order to provide personalized treatment for this group of patients and decrease the risk of MTX side effects.

Aim of the study. To evaluate the association between the presence of the MTHFR gene mutation and methotrexate responsiveness using Juvenile Arthritis Disease Activity Score (JADAS71), Pediatric ACR 20,50,70,90 Index and Methotrexate Intolerance Severity Score (MISS) in children with JIA.

Materials and methods. A case-control study included 18 children with JIA who had being on MTX treatment for more than 6 months. Clinical and laboratory data of all patients was analyzed in order to determine the JADAS71 Score, Pediatric ACR 20,50,70,90 Index and MISS Score. The JADAS71 Score and Pediatric ACR 20,50,70,90 Index allow assessing disease's activity. The MISS Score is used to evaluate the MTX side effects. The polymorphism C677T of the MTHFR gene was identified using the PCR techniques.

Results. There has been examined 18 children in whom was identified 7 (38.9%) cases of no mutation, 2 (11.1%) cases of T/T homozygotes and 9 (50%) cases of C/T heterozygotes in the 677 nucleotide of the MTHFR gene. The JADAS71 Score was higher in the heterozygote cases with the mean value 18.1 (p=0.0013), compared to the non-mutation sample – 2.7 (p=0.0022). The Pediatric ACR index in heterozygote sample had a mean value of 22% (p=0.0011) clinical improvement compared to the control group - 37% (p=0.001). The MISS score in heterozygotes had a mean value of 7.8 (p=0.0011) points compared to the control group – 4.6 (p=0.001).

Conclusions. A significant correlation between the MTHFR gene heterozygote mutation status and the MTX non-responsiveness, as well as the side effects occurrence has been revealed. These preliminary results may suggest the need for an individual genetic examination before immunosuppressive treatment in JIA initiation.

Key words: methylenetetrahydrofolate reductase, methotrexate, arthritis, children

71. INTRODUCTION OF SOLID FOOD TO INFANTS: NEW PATTERNS OF PARENTING

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Introduction. The moment parents introduce solid food to their child is considered a fundamental step in a healthy development of an individual. Nevertheless, it remains a really controversial topic, making room for new theories and new patterns of parenting. This often leads to the idea that the previous models are harmful to children and have to be forbidden. At the same time the errors that can occur during this period of maximum impact on the child growth become evident not necessarily in the nearest future. These are especially prominent in childhood and adolescence, when the personality and discernment of the child develops in conjunction with their own food choices.

Aim of the study. The aim of this study was to identify what are the most common nutritional mistakes parents make, how this new parenting patterns have changed the way people feed their children and whether these new changes had a positive impact on child development or not.

Materials and methods. 257 parents from Romania have filled out an anonymous survey, that included 72 questions which included mainly the following topics: the optimal moment for starting solids, the most common signs infants present when they are ready to eat solids, the sources where parents find the information about child development from, types of solid foods infants should start with and the most common beliefs parents share about this process.

Results. From a total of 257 study participants, aged between 21 and 36, only 31,9 % believed that an infant is ready for solid food at around 6 months old, the other 23,7% consider that a child is to take solids later than 6 months and 44,4% believed they are ready way earlier than 6 months of age. The study also concluded that parents inform themselves from a wide variety of sources, but only a small percent of them go to pediatricians or use medically approved sources.

Conclusions. Our study showed that parents tend to use a wide variety of sources regarding children nutrition as primary, while disregarding medically approved information. The new parenting patterns promote self-thought child development, and unfortunately, this leads to an increased number of misinformed parents.

Key words: parents, infants, development patterns, solid food, diversification

72. APGAR SCORE AND NEONATAL MORTALITY IN A HOSPITAL LOCATED IN TRANSYLVANIA, ROMANIA

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Introduction. The Apgar score was developed in 1952 and used like a convenient method for reporting the status of the newborn infant immediately after birth. Despite the advent of modern