

**Scopul** studiului a fost aplicarea și validarea scorului funcționalității KOOS la pacienții cu osteoartroza genunchiului.

**Materiale și metode:** În cercetare au fost incluși 60 pacienți cu OA genunchiului, vârsta medie  $63.23 \pm 1,6$  (iv 42-82 de ani). Pacienții au respectat criteriile de diagnostic R. Altman 1991, simptomele clinice fiind prezente cu cel puțin 3 luni înainte de inițierea studiului. Evaluarea a presupus cercetări generale și speciale-scorul funcționalității genunchiului KOOS (Knee injury and Osteoarthritis Outcome Score), un chestionar de autoadministrare ce include 42 iteme grupate în 5 domenii: 1. Durere; 2. Simptome; 3. Activitățile vieții cotidiene; 4. Sport și recreere; și 5. Calitatea vieții. Răspunsurile se apreciază de la 0 la 4 puncte, ulterior rezultatul este calculat pentru fiecare domeniu și exprimat în procente. Scorul de 100 puncte semnifică lipsa simptomelor, iar 0 indică simptome severe. A fost aplicată scala VAS pentru evaluarea durerii și aplicarea scorului generic WOMAC (Western Ontario and McMaster Universities Osteoarthritis Index) pentru evaluarea osteoartrozei pe domeniile de cercetare: durere, redoare și funcția articulară.

**Rezultatele obținute:** La pacienții cu osteoartroza genunchiului, raportul gender a fost de 2,3:1, cu predominanța femeilor. Am analizat fiabilitatea, validitatea și responsivitatea prin chestionarul KOOS. La analiza indicelui funcționalității pe domenii s-a determinat că domeniile afectate sunt: capacitatea de a practica sport sau de a efectua exerciții fizice intense cu scorul 33%, calitatea vieții - 45,37, apreciată ca joasă, iar pentru posibilitatea realizării activităților cotidiene este de doar 48,81%. Scorul mediu al durerii apreciat prin scala KOOS a fost de 48,7% (i-v 5,1-92,8), iar tulburările funcționalității articulare și redoarea matinală le-am depistat la 67,18%, calificat ca scor înalt. Indicele WOMAC a măsurat durerea la un nivel de 49,55%, redoarea - la 65,4%, iar funcția articulară cu scorul mediu de 53,9%. Compararea KOOS și WOMAC pe domenii similare a dat indicele  $r=0,5-0,85$ , calificat drept corelare strânsă. Nivelul durerii apreciat prin VAS și KOOS s-a atestat cu indice de corelare  $r=0,73$ , ceea ce înseamnă o corelare înaltă.

**Concluzii:** La pacienții cu osteoartroza genunchiului domeniile cele mai implicate sunt activitățile fizice intense, posibilitate redusă în efectuarea activităților cotidiene, în practicarea sportului și diminuarea calității vieții. Scorul funcționalității genunchiului KOOS a demonstrat validitate și fiabilitate la pacienții cu osteoartroza genunchiului.

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## RECONSTRUCTIVE OPERATIONS IN CHILDREN AND TEENAGERS WITH SPINE DEFORMATIONS

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**Key words:** spine, deformation, children.

**Introduction.** Irrespective of etiology, spine deformations in adolescents represent the cause that influences the main peculiarities of the spinal column: its safety and stability; initially it is manifesting by pains, statics infringements, and internals' dysfunction, subsequently it leads to severe decrease of quality of life. The choice of surgical and therapeutic options in the management of spine deformations in children is still controversial.

**Work's goal:** improvement of a life quality of children with spine deformations.

**Material and methods.** 109 patients with spine deformations have been pre- and postoperatively examined. The evaluation included collecting of anamnesis data, clinical examination, labs and imaging (standard radiography/ with functional tests, magnetic resonance) with a follow-up of 1 to 5 years. Children were aged between 3 and 17 years; they were predominantly boys - 61(56 %). Etiology of spine deformations was: traumatic injuries in the acute stage - 29 (26,6 %) patients, posttraumatic cyphosis deformations - 5 (4,6%) patients, scoliosis - 58 (53,2%) children, spondylolisthesis - 17 (15,6%) patients.

**Results.** The main goals of surgical interventions were: elimination of the compression factor, deformation and disbalance. correction and spine stabilization.

Surgery allowed obtaining the following results:

1. Reposition (reduction) of the body of displaced vertebrae;
2. Reconstruction of forward and average spine columns;
3. Restoration of physiological spine profiles (frontal and sagittal);
4. Restoration of normal anatomy of the vertebral channel;
5. Stabilization of the spine-impellent segment.

The comparative analysis of the quality of life of patients with severe spine deformations (according to a questionnaire „EQ-5D”), before and after surgical intervention, has shown that the quality of life of patients in postoperative period essentially improved, in comparison with the preoperative period, from  $12,7 \pm 0,3$  points to  $6,7 \pm 0,1$ . The distant results of surgical treatment were good - 85, 1%, satisfactory - 11,2 % and unsatisfactory - 3,7%.

### **Conclusion:**

1.) In fresh cases of the complicated spinal - marrow trauma with mild and average degree of a neurologic symptomatology (degree of D on Frenkel) the preference was given to the closed, indirect decompression. At a serious neurologic symptomatology (A, B, C degree) carried out open decompression and revision of dural bag's contents.

2.) Optimum method of correction of difficult rigid scoliotic spine deformations were: forward spine release; dorsal correction and backbone fixation by a metal construction.

3.) Surgical treatment of difficult juvenile scolioses began at 10-12 years old, and combined forward spine release with the following dorsal correction without posterior spine fusion execution.

4.) In cases of congenital deformations primary operative defect's correction was carried out at children at the age of 3-7 years - "blocking spondylosynthesis" at curvature top with the following dorsal correction by "a growing construction" without posterior spine fusion execution.

5.) Final correction of deformation, posterior spine spondylosynthesis and thoracoplasty are carried out on the end of spine growth.

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### **THE IMPACT OF ANTIBIOTICS IN INDUCING INFLAMMATORY BOWEL DISEASES TO CHILDREN**

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**Background.** The etiopathogenesis of inflammatory bowel disease remains ambiguous, today being discussed as a combination of genetic modification and as immunological disorders caused by enteric microflora interaction with the enteric mucous membrane, that damages it later. But the role of antibiotics in the enteric microflora changes and the activation of ulcerative colitis and Crohn's disease require further studies, especially to children of early age.

**Objectives.** The interrelationship estimation of antibiotics for children in the first year of life, and the nascency of inflammatory bowel disease.

**Material and methods.** The study was prospective and included patients admitted to the Gastroenterology Department, Mother and Child's Institute, during 2010-2012, with a diagnosis of ulcerative colitis or Crohn's disease, endoscopically and histologically confirmed. The role of antibiotics in inflammatory bowel disease was assessed follow-up lots of inquests, as well as by examining ambulatory cards, as well noting the pharmacological group of the antibiotic, the dose, the duration of therapy and the number of treatments.

**Results.** The study involved 41 children with ulcerative colitis, 36 (87.8%) and Crohn's disease 5 (12.2%) with a mean age of  $72 \pm 23.93$  months. Antibiotics were observed in 16 children (39.02%), cephalosporin group, generation II (62.5%) and third generation (37.5%). In 9 cases (56.25%) drug dose was increased, not adjusted to the child's age. The mean duration of therapy was  $6.73 \pm 1.65$  days, and the average number of cures administered was  $2.12 \pm 0.5$  courses.

**Conclusion.** The impact of antibiotics in inflammatory bowel disease outbreak is irrevocable, particularly ulcerative colitis and administration, mainly cephalosporin, in the first year of life in overdose and in repeated courses is directly related with early appearance and evolution of inflammatory bowel disease to children.

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### **LE DÉBUT DES MALADIES INTESTINALES INFLAMMATOIRES CHEZ LES ENFANTS**

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**Actualité.** La colite ulcéreuse et la maladie de Crohn se caractérise par une apparition inhabituelle, en particulier aux enfants plus jeunes (âgés de 0 à 2 ans), en plus le diagnostic de la maladie inflammatoire intestinale est établis dans 1% des cas parmi les enfants de jusqu'à 1 an.

**Le but** de l'étude était d'évaluer l'apparition des signes cliniques des maladies inflammatoires de l'intestin chez les enfants.

**Matériel et méthodes.** L'étude était prospective et a permis l'examen des patients du Département de Gastroentérologie, Institut de la Mère et de l'Enfant, pendant la période de 2010-2012, avec un diagnostic de colite ulcéreuse ou maladie de Crohn, confirmé par voie endoscopique et histologique.

**Résultats.** A cette étude ont participé 41 enfants, dont 36 (87,8%) avec la colite ulcéreuse et 5 (12,2%) avec la maladie de Crohn, âgés de 4 mois à 17 ans avec un âge moyen de  $72 \pm 23,93$  mois, tandis que l'âge moyen au début était de  $51 \pm 19,91$  mois. La cause principale des patients avec de la colite ulcéreuse était la rectalgie des 34 enfants (94,5%), suivie de la diarrhée 20 enfants (55,56%), associée du syndrome fébrile dans 10 cas (27,77%) et chez les pa-