

2 months and total to 16 months.

**Result:** Six months after the last surgical intervention the clinical and radiological evolution is favorable. The patient is satisfied with his functional results, having a Harris score of 69 points on the left side and 92 points on the right side after 4 years of hip arthroplasty.

**Conclusion:** For obtaining good and long-drawn results in the treatment of bilateral hip joints disorders, it is necessary to correct the important deformities and to restore the biomechanics of the pelvis and hip joints.

**Keywords:** femur, osteosynthesis, hip, arthroplasty.

## SAMPLING OF FREE TRANSPLANT BONE-TENDON-BONE BY MINI-INVASIVE WAY OR BY CONVENTIONAL WAY: PROSPECTIVE AND COMPARATIVE STUDY OF 36 CASES



**A. Ioncu\***, **N. Bonin\*\***, **R. Pavalache\*\*\***, **D. Dejour\*\***

\*Service d'orthopédie, C.H. Draguignan

\*\*Service d'orthopédie, Clinique la Sauvegarde, Lyon, France

\*\*\*CHU Sf. Pantelimon, Bucarest, Romania

The study has been carried out at the Emile de Vialar Clinic in Lyon (France)

The aim of that study is to analyze the feasibility of the mini invasive technique through a comparative and prospective study uni-centric realized on two groups: "classical" and "mini-invasive" of 18 patients. The patients have been checked 6 to 8 months after the surgery. Check has been clinical, radiological and echographycal. Radiological laxity has been evaluated for each compartment. The echographycal study analyzed the the patellar tendon and peri tendon.

All data were extracted on an Excel spreadsheet (Microsoft) and analyzed with spreadsheet tools and those of the toolbox Statistical Toolbox (Matlab).

A radiological classification of the anterior tibial tuberosity (TTA) was established. The study highlights a correlation between the TTA and the patellar apex.

The grafts taken by classical technique showed in every case good characteristic, against 45% of cases taken by «mini-invasive way". The earlier pain was 22 % in the "classic" group and 33% in «mini-invasive».

Data analysis showed no correlation between the earlier pain and (a) the result of "knee walking" test or (b) the thickness of the peri- tendon. It was found a correlation between the results of «knee walking» test and the asymmetry of tabs width in the "mini-invasive" group.

The IKDC scores: a) Subjective was virtually identical and b) Objective was 94% (or A) to the "classic" group and 81% (A or B) to the group "mini- invasive".

This "mini- invasive" technique respects the infra- patellar branch of intern saphenous nerve in 95%. The indication of sampling patellar graft by "mini invasive" technique is the TTA type III.

## IMPORTANCE OF SCHOOL SPINAL SCREENING IN EARLY DIAGNOSIS OF SPINE DEFORMITIES



**Anna Kusturova\*,\*\***, **Nicolae Caproș\***, **Vladimir Kusturov\*,\*\***

\*State University of Medicine and Pharmacy "Nicolae Testemițanu", Republic of Moldova

\*\*Institute of Emergency Medicine, Chișinău, Republic of Moldova

**Introduction:** Spine deformities, especially idiopathic adolescent scoliosis is a common disease with a prevalence of 0.47–5.2 %. Early clinical detection of scoliosis relies on careful examination of trunk shape and is subject to screening programs in many countries. School-based screening for scoliosis is performed primarily for the purpose of early detection of spinal deformity, which enables implementation of early conservative treatment that can reduce the risk of curve progression. Although X-ray is the gold standard for diagnosis of idiopathic scoliosis, it is not used as a screening method because of the risks associated with radiation exposure.

**Materials and methods:** School spinal screening was performed in Republic of Moldova for the first time. A project initiated by the authors has been started in the schools of Chisinau city. School spinal screening was performed in 2741 pupils aged 6-17, mean age - 11,47±0,057 (95% CI: 11,36-11,58). There were 1278 (46,63%) girls and 1463 (53,37%) boys. Clinical orthopedic examination of the spine was performed using six standard positions including Adams forward bending test

and the scoliometry - measurement of angle of trunk rotation (ATR). Seven degrees of ATR was chosen as cut-off point for referral to radiography.

**Results:** During school spinal screening we detected 773 children with spine deformities, the majority was determined for the first time. Functional spine deformities were found in 641 pupils presenting as round back (15,9%), flat back (18,3%), lordotic (4,8%), kypholordotic (11,9%) and asymmetric (49,1%) posture. Scoliosis gr.I-II was detected in 132 pupils who presented positive on both standing, forward bending test and scoliometry > 7°. There were 82 (62,1%) girls and 50 (37,9%) boys. Definitive diagnosis was confirmed on standing spondilography. The individual treatment program was created for everyone.

**Conclusions:** The proposed complex examination scheme including orthopedic clinical and instrumental examination, provides to determine the risk factors of development of spinal deformity, monitoring ensures the accuracy of diagnosis, prediction of the disease and helps to improve clinical and functional outcomes of rehabilitation.

**Keywords:** spine deformities, scoliosis, school spinal screening, complex examination, rehabilitation

## PLATELET-RICH PLASMA IN TREATMENT OF DEGENERATIVE AND TRAUMATIC LESIONS



**Eugeniu Melnic, Alexandra Ciobanu, Nicolae Erhan, Andrei Olaru, Marcel Vovc**

*Medical clinic "Galaxia", Chișinău, Republic of Moldova*

**Objectives:** Platelet-rich plasma (PRP) is defined as a portion of the plasma fraction of autologous blood having a platelet concentration above baseline PRP also has been referred to as platelet-enriched plasma, platelet-rich concentrate, autologous platelet gel, and platelet releasate. PRP serves as a growth factor agonist and has both mitogenic and chemotactic properties. It contains a high level of platelets and a full complement of clotting and growth factors. Analyze of methods use PRP-therapy in different osteo-articular diseases and arthroscopical surgery, benefits comparative with surgery without PRP-therapy, benefits PRP-therapy in postsurgical rehabilitation.

**Methods:** The study includes analysis of cases of non-surgical and arthroscopic treatment of patients with traumatic injuries and degenerative medial femoral condyle chondropathy associated with grade 2-3 treatment that followed in 2013-2015. Clinical evaluation was performed by visual- verbal scale (VAS) in all patients, analysis of five significant factors for patients: pain, mobility, functional disability, return to work loaves disease, satisfaction followed effective treatment. Cartography was the best MRI investigation, which has proven effective for stimulating regenerative chondral

**Results:** the result was significantly better in patients with chondropathy that followed PRP therapy, clinical improvement is much taller than improving ascertained by MRI. The greatest differences in satisfaction or certificate received treatment and return to usual activities. For patients with synovitis brief duration of postsurgical patients that followed PRP postsurgery therapy was 3 times smaller

**Conclusions:**

1. The use of PRP therapy in patients with medial femoral condyle chondropathy gr.2-3 in postsurgical rehabilitation 2 times shortened recovery period.
2. The number of people who returned to work or professional sports was 35% higher in the group that followed PRP therapy
3. High efficiency PRP therapy allows to recommend the conduct regular medical rehabilitation in this patient group

**Keywords:** chondropathy; PRP therapy; knee arthroscopy;

## THE CERVICAL PAIN SYNDROME IN CHILDREN AND TEENAGERS



**Anatol Moraru\*, Nicolae Shavga\*\*, Nicolai Shavga\*\*, Veniamin Golub\***

*\*Mother and Child Health Care Institute, Chișinău, Republic of Moldova*

*\*\* State University of Medicine and Pharmacy "Nicolae Testemițanu", Republic of Moldova*

**Purpose:** to find the diagnostic methods for determining the etiology of the cervical pain syndrome; to elaborate the optimal treatment strategy.

**Materials and methods.** The clinical experience is based on the results of examination and treatment of 587 children 3-17 years old over the 15-year period. The acute pain was noticed at 138(23.5%) patients and the chronic one – at the 449(76.5%).

**Results:** All the cases of the acute pain syndrome were caused by the acute subluxation in the atlanto-axial joint. In 111(80.4%) cases it appeared after a trauma and in 27(9.6%) – after inflammatory processes in the nasopharynx. The C1-C2 subluxation was also determined at 393(87.5%) children with the chronic pain syndrome. The pain at these patients was always accomplished with the symptoms of vertebro-basilar insufficiency and different neurological signs. At the another.