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THESIS
ABSTRACT
IMPLICATIONS OF NONSTEROIDAL ANTI-INFLAMMATORY IN DEGENERATIVE LUMBAR SPINE PATHOLOGY

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I. INTRODUCTION

Title of "degenerative spine disease" refers to any disease of the spine resulting from the aging process, the wear bone and soft tissues of the spine. These diseases are a major cause of chronic adult disability in employment, pathology being present at a very high variability of age (Frost H, Lamb S, Doll HA et al, 2004).

Symptoms caused by degenerative diseases of the spine varies according to each patient's specific pathology. Pain, localized back or neck, arms or legs, is a common finding. In addition, neurological symptoms arising from nerve compression or spinal cord itself may be present. This can often cause sensory symptoms (such as numbness, tingling, pain, etc.) and motor symptoms (weakness or paralysis, muscle weakness, abnormal reflexes, etc.). Again, each patient and each disease is different (Detweiler PW, Spetzler CB, Taylor SB, et al, 2003). In general, aiming degenerative lumbar spine injuries will lead to back pain and leg, while the cervical spine damage, will lead to symptoms in the neck and arm.

Painful limitation of mobility is, in fact, measurable functional clinical expression of pain in all its aspects, and paravertebral reflex muscle contraction, which we consider later.

The problem can be confusing as both patients and doctors was always a discovery of causes, potential sources of pain, given that pain can come from the bones, joints, ligaments, muscles, nerves and intervertebral discs and the paravertebral tissues.

Conclusion on the evolution of these syndromes, the cardinal symptom, lumbar pain, is that her and through her entire clinical picture secondary, are effectively "monitored" by anti-inflammatory treatment of necessity supported by physiotherapy.

Changing lifestyles and the introduction of kinetic program, and constant daily activities, even excluding the use of anti-inflammatory.
II. THEORETICAL STUDY

A. DATA ANATOMY OF THE SPINE

Spine occupies a central position in the locomotor. "Only one who knows what the game is geared column in static and dynamic forces of the human body can properly integrate the whole importance of this central organ in its diagnostic and therapeutic thinking (Schmore-Iughanns).

B. DEGENERATIVE LUMBAR SPINE SYNDROME EVOLVING BACK PAIN

Noninflammatory arthropathy. Osteoarthritis term used in anglo-saxon literature to define osteoarthritis is a misnomer because inflammation is the main pathological process observed in this arthropathy.

Joint arthritis is a widespread disease. Although studies show degenerative changes of the joint body that supports a load of 90% in people over 40 years, symptoms are usually present. Prevalence and severity of osteoarthritis increases with age.

C. LOW BACK PAIN SYNDROME - GENERAL CONSIDERATIONS

Back pain syndrome is benign disease with significant economic implications in industrialized countries, the most frequent cause of activity limitation in people younger than 45 years, is defined as pain that persists for more than 12 weeks and is often due to illness or traumatic degenerative spine. (Hurwitz EL, Morgenstern H, Harber P, et al., 2002).

D. BACK PAIN GROUNDS

Structural causes - abnormal transitional vertebrae, spina bifida, spondylisis, spondylolistesis, abnormal vertebral surfaces; functional reasons - scoliosis, limb length inequality, perverse attitudes, load in flexion contracture of the hip or knee; Infectious causes - piogen osteomyelitis, tuberculosis; Causes inflammation - arthritis, spondylitis, myositis, fibrosis; causes degeneration; cancer; traumatic causes; metabolic causes.

E. EVOLUTIVE MECHANISMS IN BACK PAIN SYNDROME

Syndrome, chronic low back pain syndrome is not the same as acute back pain lasts longer. Usually occurs after 6-7 weeks to heal damaged tissues and joints, however, 10% of back pain syndromes is not resolved during this period.
F. GENERAL - ANALGESICS, ANTIPYRETICS AND ANTI-INFLAMMATORY

A number of medicinal properties add analgesics, antipyretics and anti-inflammatory, symptomatic character. The prototype is acetylsalicylic acid, which has all the effects of moderate intensity, with predominance of analgesic and antipyretic effects for low doses and highlighting the anti-inflammatory effect for high doses.

III. MATERIAL AND METHOD

Objectives of the study suggest:

- quantifiable assessment of musculoskeletal syndromes lumbo-sacral ligament, and a phased recovery program;
- highlighting the effectiveness of treatment program, which prevents the installation of relapses and / or complications, with important functional implications.
- development of a scale for assessing and tracking the effectiveness of rehabilitation therapy of patients with degenerative lumbar pains.

Impact of NSAIDs administered to patients with pain lomabre and correlated with pain severity.

SELECTION OF CASES

In a first stage of research have established the study group by selecting cases with clinical diagnosis of low back pain (low back pain) with or without radiculopathy with herniated lumbar disc or degenerative clinical entity. Of the 649 patients selected from the records offices of Orthopaedics, Traumatology and Rehabilitation of the Emergency County Hospital Craiova with this diagnosis during the period January 2004-September 2007, 409 met the criteria for inclusion in the study. The 409 cases were classified as follows:

- 241 with low back pain from herniated disc with or without neurological impairment
- 120 with low back pain with degenerative other clinical entities - 48 have undergone surgery for removal of herniated lumbar disk.

All patients received research investigation using magnetic resonance T1 and T2, which confirmed the clinical diagnosis and lesion set.

Methods of quantification and visual pain scale: scala graphic visual, scale verbal, body pain subscales, scale behavioral, numerical scale.
IV. RESULTS

Most episodes of lumbar low pain (LLP) to easily resolve: once a week, less than half of patients suffers from a pain at eight weeks and their share falls below 10%.

Unfortunately, the relapse rate is 75% in the next 12 months. LLP is apparently equally distributed between men and women. In men, the causes are most often represented by efforts to lift heavy objects using nefiziologic movement of the column and not the knees and hips (the most dangerous move is the return of flexion and rotation of the spine), sometimes LLP occur after falls, local trauma, those who spend long seat (drivers, clerks) or those working with machinery vibration. Women are more likely to LLP in pregnancy (most commonly in the third trimester of pregnancy) maternal weight or sporting habits of the mother's pregnancy or have an influence.

For each case studied we noted age, environment of origin, diagnosis, evidence of symptoms, treatments, details of which I summarized in a table reproduced below, by which I subsequently failed to achieve statistical studies on the effect of treatment with antiinflamtorii drugs in degenerative lumbar spine disorders.

Analyzing patients' records show localized lumbar pain (361 cases) we found predominance of lesions easily degenerative arthritis interapophysis (130 cases, representing 36%) at the expense of rarer entities such as spondilolistesis - 10 cases, representing 2%. There is an increasing trend for adverse neurological presentations resulting from spinal canal stenosis - 38 cases, 10%. Of course, as expected, patients with lumbar disc hernia are well represented - 95 cases, 26%.

Although the number of patients who underwent surgery for lumbar disc hernia was small, statistical significance is still giving me the possibility of significant appreciation of clinical importance and prognostic paraclinical.

The main associations observed in the cases studied are plotted in table and chart above. Statistical-mathematical analysis of degenerative joint disease of lumbar spine shows a net predominance hiperlordosis association, osteoarthritis with herniated intervertebral lumbar intervertebral disc (36 cases) but also hiperlordosis with herniated disc (32 cases). Spinal canal stenosis complicated by intervertebral disc herniation recorded a lower incidence - only 10 cases.

Analyzing graphic and table above we see some general signs and symptoms - back pain, paresthesia, radicular irradiation - seen in all cases studied, the large
proportion. Functional impotence, on the other hand, is the prerogative of advanced evolutionary phases, are less common in patients participating in our study.

In all cases registered medicinal treatment was applied consisted in particular in the administration of NSAIDs and opioid analgesics, but only rarely for short intervals. Is remarkable and effective physiotherapy treatment and local injection of cortisone and anesthetic substances. Surgical interventions have proved effective in cases of herniated lumbar intervertebral disc.

Next I will present results obtained in mathematical statistic analysis of the batch of patients hospitalized in Department of Rheumatology, I watched both customary and common statistics paramentri biomarkers and various methods of treatment applied.

In the evaluation of rehabilitation, we studied a group of 34 young patients who have addressed our service to a suffering lombosacral triggered after a physical effort. Clinical and laboratory examinations excluded other causes of disease - discopathy, vertebropathy or otherwise. Was found instead, the presence of static disorder of lombosacral segments, sometimes back, neglected, developed sagittal plane and / or front.

Initial treatment consisted of combined administration of Diclofenac / Aflamil (1tbx3/day) --inflammatory painkiller associated with Clorzoaxazona (2tbx3/day) - relaxation for three weeks. Drug therapy was supported by a complex consisting of thermotherapy physical rehabilitation, followed by electroanalgesic (CCD + interferential current), physical therapy and abdominal massage.

The results obtained after initial treatment was good:

- lombosacral pain disappeared and the referenced rate of 70.6%
- pain on palpation and muscle contractions were completely gone
- painful limitation of mobility has improved at a rate of approx. 70% on all axes of motion
- average clinical score fell just 1.35 points, the distribution of the classes of gravity has changed significantly, full recovery being recorded in 67.6% of cases and mild pain in 23.5% of the cases.
V. DISCUSSIONS

Knowing that such syndromes are algic diseases with functional impotency, of lombosacral muscles, who reoffend frequently, consider offsetting them with the necessary tracking and periodic recovery, we propose a simple scale for assessing and tracking the effectiveness of rehabilitation therapy applied, especially framing offer patients suffering a degenerative lumbar phased program of rehabilitation.

Pain disappears in proportion of 70-80%, and then to over 90% of cases from one stage to another treatment. Explanation for this trend is ascendant in the impact of anti-inflammatory medical treatment, properly supported physics: from one stage to another is simplified medical treatment (first stage - double therapy, NSAIDs and non- contracturant therapy, the second stage - anti-inflammatory treatment, the third stage - not medication is necessary), and a date with him, treatment associated physical changes, focusing on appropriate kinetic program, which must constantly become a new lifestyle for patients with this disease: if the first phase recognize complex physical therapy, these phases focuses on kinesiology, trained and supported by thermo-and massotherapy.

Severity class distribution shows drastic reduction of the ratio of severe cases of control to another (from 79-17%, and then to 11%) and increased after each stage clinical management of complete functional recovery ratio in the group studied (the at 67-85%, and then to 90%).

Proposed phased program of new means of recovery are to work effectively to help full rehabilitation of patients in daily activities and obviously to improve the living conditions of people of working age, increasing their ability to respond to specific the physical.

In conclusion, knowing that pain syndromes are diseases that recur frequently lombosacral, consider offsetting them with the necessary monitoring and periodic recovery without relapse or installing expect any complications, more difficult to treat and resolve. This study proposes a simple scale for assessing and tracking the effectiveness of rehabilitation therapy applied, especially patients suffering proposes a phased program of rehabilitation.
VI. CONCLUSIONS

- Back pain from degenerative diseases is an extremely common cause of morbidity and disability, causing the patient to seek qualified medical personal.
- To calculate the intensity of pain - one of the most important variables of pain - verbal and numerical scales seem to be preferable to traditional visual scales.
- Our study of patients in an integrated medical program, phased in three stages at intervals of one month and 3-6 months respectively, applying anti-inflammatory medication + / - non-contraction, thermo-kinetic-massotherapeutic supported.
- The results show improvement of clinical parameters and recovery upward from one stage to another, reaching phase III of the program, the functional complete recovery suffering (over 90% from the initial stage).
- Our study has proposed a quantifiable evaluation of lumbo-sacral syndromes and a phased recovery program, in addition, this program proves effective treatment that prevents installation of relapses and / or complications, common and often important functional implications.
- When the patient is not able to resume work after 4-6 weeks is necessary reduction treatment in conditions in which the true diagnosis was established, it is advisable to resort to personal factors, psychosocial, and occupational and checkups interdisciplinary.
- To decrease the incidence of complications and duration of disability, clinicians should encourage patients with low back pain to stay active by giving conservative treatment.
- Consider useful straps regular maintenance, performed at intervals of about three months, in order to prevent relapses, and also to increase exercise capacity of patients. Program will be phased in and maintained in the kinetic activities of daily living.
- Proposed phased program of new means of recovery are to work effectively to help patients return to full daily activities and also improve the living conditions of people of working age, with increased capacity in response to the physical.
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- Currently enrolled in PhD program of Medical University of Craiova, thesis in Clinical Pharmacology: “Implications of Anti Inflammatory Drugs in the Degenerative Pathology of the Lumbar Spine”
- Medical University of Craiova, Romania, degree granted: M.D. 2004
- Law School of University of Craiova, Romania, degree granted: Bachelor of Law, 2003

Continuing Medical Education (courses, congresses and seminars):
- 3rd International Symposium “Education through Movement”, Craiova, 2010, with the research paper “Arthritis and Professional Athletes”
- Pathology Clinic, Medical University of Athens: “Electrolyte disorders: Disorders of Potassium Homeostasis: Hypo/Hyperkalemia”, Athens, 2009
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  - Breast Cancer for the Primary Care Provider, 2008
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  - Lifestyle Medicine for Weight Management, 2008
  - Metastatic Case Studies in Prostate, Breast, Colorectal, and Lung Cancer, 2008
- 11th International Workshop on Multiple Endocrine Neoplasia, Delphi, 2008
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- 5th National and 20th Balcanic Congress of Cardiothoracic, Heart and Blood Vessels Surgery, Athens, 2004
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