

Causes of Back Pain. How to Treat?

Karski Tomasz^{1*} and Karski Jacek^{2}**

¹Professor Lecturer in Vincent Pol University in Lublin

²Assistant Professor in Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin

*Corresponding author: Karski Tomasz, Professor Lecturer in Vincent Pol University in Lublin, Poland



ARTICLE INFO

Received: 📅 April 03, 2019

Published: 📅 April 10, 2019

Citation: Karski T. Karski J. Causes of Back Pain, How to Treat?. Biomed J Sci & Tech Res 16(5)-2019. BJSTR. MS.ID.002926.

Keywords: Back Pain; Causes; Physiotherapy

ABSTRACT

According to our observations there are following main causes of spinal pains syndromes, very frequent in many persons in many countries:

- Lumbar hiperlordosis as result of hips flexion contracture.
- Lumbar “C” or “S” scoliosis in Lublin classification (2nd etio-pathogenetical group [epg] - see literature) caused by permanent standing ‘at ease’ on the right leg.
- Stiffness of the spine as clinical sign of scoliosis in 3rd epg group in Lublin classification.
- Spondylolisthesis or spodylolistis in sacral-lumbar or lumbar spine.
- Other-rare causes.

According to authors- The proper treatment is physiotherapy. It is in opposition to other authors who mostly speak about “prolapsed nucleus” and they proposes surgery [1-7].

Introduction

In article we describe the causes of the back pain [8-19]. The same opinion was S Malawski et al. [20,21]. We describe also the possibility and effectiveness of physiotherapy of the back pain syndrome. We present details of ours physiotherapy methods.

Hiperlordosis of lumbar Spine

The deformity is connected with the hips flexion contracture, in result anterior tilt of pelvis and next “hiperlordosis of lower part of spine” what is the frequent cause of “back pain”. The primary cause of “the back pain” is Minimal Brain Dysfunction (MBD) in newborn, babies and next in older children. When this disorder is not treated in adolescents period of life in adults causes the back pain. In some patients the hiperlordosis of lumbar spine can be the compensatory deformity of ante-pulsion position of shoulders. Such causes are mostly in women when in girls’ period of life they had the habit to put shoulder forwards.

Degenerative Lumbar or Lumbar-Thoracic Left Convex Curve

In this group of patients the “back pain” in causes by so-called idiopathic scoliosis in second group in Lublin classification. There

are “C” or “S” curves of the lumbar spine are connected with the special “model of hip movements” and next with “permanent standing ‘at ease’ on the right leg”. This asymmetry of hips movement is connected with the Syndrome of Contractures and Deformities [21,22]. The adduction of the right hips in straight position of joint is limited, because of this the hip joint is more stable and right leg is taken for permanent standing ‘at ease’ [23].

Stiffness of the Spine

In this group “the back pain” is connected with the stiffness of the spine. This deformity belong to scoliosis in 3rd epg group in Lublin classification. The spine deformity is connected with the special model of hip movements and next with “gait”. In situation of maximal limited adduction of movement of right hip and limited movement of left hip (examination in straight position of joint)-during gait the “absent movement of hip or hips” is transmitted to the pelvis and to the spine as bigger than normal rotation movement. In results of this rotation movement appears distortions in inter-vertebral joints and in next stiffness of the spine. The stiffness of the spine disturbed this activity and if is not present come to “pain’s distensions symptoms”.

Spondylolysis or spondylo-listhesis: In this group the pain is because of dislocation of vertebra bodies mostly in the connection of L5 and S1, in some cause between L4 and L5, in other cases in two levels L4 - L5 - S1. The cause of spondylolisthesis can be congenital or acquisitioned. This second form is mostly after overloading of lumbar part of spine in special hard form of job in industry, in farmers work at cetera.

Other - Rare Causes - Urgent and Acute "Prolapsed Nucleus"

Patients in this group belong to the group with "hiperlordosis of lumbar spine" and to group with "degenerative left convex lumbar scoliosis". In older age, in special hard job situations, can appear "acute back pain syndrome" in lower part of spine. The annoying pain can be in lumbar or sacral - lumbar part of spine. The movement in this part of spine "in pain time" is totally limited. The urgent and acute "prolapsed nucleus" can appear in cervical part of spine. Other causes of "pain syndromes in cervical part of spine" is endezopathies.

Material

The whole material count 286 patients with the age 40-70. All patients suffered because of pain in lower part of spine. Precise diagnosis found the causes described in subchapters and mostly there were "hiperlordosis" and "degenerative scoliosis" of lumbar part of spine.

Physiotherapy

Our Treatment in Points:

- a) Chair extension for the lumbar spine" for 20-30 minutes, five or more times every day. When heavy pain- extension should be longer time, even whole day.
- b) Rest and sleeping in embryo position- mostly on the right side of the body.
- c) Important in the therapy is to avoid the "standing 'at ease' on the right leg" in every day situations. We recommend to stand on the left leg or on both legs in abduction of 20-30 degree and in internal rotation of hips 15-20 degree.
- d) Very beneficial is thermotherapy of lumbar spine, gentle hand massage, laser, local criotherapy, magnetic field, diadynamic.
- e) Flexion exercises for the spine in the pain-free phase of the illness.
- f) Stretching exercises to correct the position of the pelvis and to lengthen flexors of knees and of Achilles tendons, plus m. triceps surae.

Conclusion

- a) The back pain causes are:
 1. Lumbar hiperlordosis,
 2. Scoliosis "C" or "S" in 2nd group of spine deformity in Lublin classification,

3. Scoliosis in form of stiffness in 3rd group of spine deformity in Lublin classification.

4. Spondylolisthesis-congenital or acquired. This group (points 1, 2, 3, 4) counts / embrace 95 % of patients.

b) Prolapsed nucleus pulpous can be the cause of acute pain in patients from various groups described above. This group counts / embrace 5% of patients.

c) We recommend the prophylaxis and treatment of scoliosis by stretching exercises to receive full movement of hip, proper position of pelvis and full flexions and rotation movement of spine.

d) Important are: standing on the left leg, sitting relax-never straight up, rest in embryo position, stretching form of sport like karate, taekwondo, aikido, kung fu, yoga.

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ISSN: 2574-1241

DOI: 10.26717/BJSTR.2019.16.002926

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