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Treatment of Chronic Lumbagos Through Rehabilitation

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Treatment of Chronic Lumbagos Through Rehabilitation

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Abstract

Lumbago is common and affects 80%-90% of the population over age 25-50 years. Objectives: Treatment of pain and improvement of articular amplitudes in patients with chronic lumbago with electrotherapy and exercises in the cabinet. The prospective study was done in the Physiotherapy Center of the University hospital center “Mother Teresa”, Tirana, during a period of 6 months: May 2012- November 2012. Study were taken in 36 cases (18 F: 18 M) diagnosed with lumbago clinical clonicete of the group age 20-60 years old.

In this study we showed that patients with chronic lumbago treated with physiotherapy have significant improvements in the level of the pain, muscular force and articulated ROM were improved.

Patients in the opening balance muscular strength had grade 3 muscle and after 10 sessions of physiotherapy the final balance of muscular force becomes 6 grade muscular.

The ROM-articulated in the opening balance flexion is 48°, and then the final flexion balance becomes 64.7°.

The ROM-articulated in the opening balance extension average is 14.7° and we made extension final balance averaging 18.1°.

ROM articulated in the opening balance of lateral inclination is averaging 22.7°, the balance becomes final average 26.5° inclination.

Based on these reports we conclude that: Rehabilitation Physiotherapy is the proper treatment for chronic lumbago, because improves the condition of patients, CLE and has no side effects.

It is recommended to perform physiotherapy twice in year.

Introduction

Lumbagia is a localized pain in the lumbo-sacral part, but not beyond to the knee, pain that lasts for at least three months, almost, daily, without improvement trend, associated with paravertebral muscle spasm, movement difficulties hindering CLE (2;5;7).

Lumbago may be unilateral or in common. Lumbago‘s causes might be: 1. Mechanical in 80-90% as trauma; spondiloliza and spondilolistezis; deformations of the column as Scoliosis and Sacral; osteoarthrosis of the vertebral column as degeneration of the intervertebral disc, almost all people over 60 years old, discopatia, the narrow lumbar canal; colons. Not normal fractures of different lengths of legs, or 2-Inflammatory, Spondilitis ankilozante ;rheumatoid arthritis ; sacrolitis osteomielitis metabolic 3-neoplazmatik, 4 osteoporosis osteomalacia, osteocontrosis 5-6 postural psychological, not stay in correct position 7-pregnancy in 50-70% of pregnant women experience lumbar pain(2;3;4;5).

Epidemiology: Lumbago is common and affects 80%-90% of the population over age 25-50 years. About 85% of the population is affected at least once during their lives. Segments are often affected by L4 –L5, L5 –S1 mainly at age 35, and the incidence increases with increasing of age. (4; 6)

Favorable factors are: lack of physical activity or hyperactivity, obesity, bad posture, depression bad way of eating, smoking.

Diagnosis of lumbago is placed of: History taking, radiological imaging examination, physical examination of the patient. The patient is observed naked and measures the amplitude of movements in the three study designs. (4, 5, 6)

Treatment of chronic lumbago is subject to: AINST as drug treatment (15) , rehabilitation and surgical treatment when there are affective treatments though these rehabilitations. The treatment occupies an important place in treating chronic lumbagos (9;10;11;12;13;14).

Objectives: Treatment of pain and improvement of articular amplitudes in patients with chronic lumbago with electrotherapy and exercises in the cabinet.

Methods

Material and methods of study

The prospective study was done in the Physiotherapy Center of the University hospital center "Mother Teresa", Tirana, during a period of 6 months: May 2012- November 2012. Study were taken in 36 cases (18 F: 18 M) diagnosed with lumbago clinical clonicete of the group age 20-60 years old.

The treatment protocol: Patients were treated for 10 days with sessions of physiotherapy (electrotherapy and exercises in the cabinet). In the last five sessions, as we reach the reduction of pain, in addition to therapeutic modalities do the exercises, exercises to increase muscular force, in active-passive way, while in the last three sessions, active exercises are like in the table below. Rehabilitation of the patient has involved 10 sessions of physiotherapy (8;9;10).

See Table 1, Table 2 and Table 3

Muscular force evaluation is done and lumbar articular amplitudes at the beginning of treatment and at the end of treatment have noticed that:

Opening balance of muscular force average grade was 3.

Articular Amplitude	Flexion	Extension	Lateral inclination of Left/right
Average initial balance	48 °	14.7°	22.7° / 22.7°

The final balance after 10 days treatment rehabilitees noted that: muscular strength by third grade at the beginning of treatment muscular runs in 6 grade muscular.

Amplitude articular	Flextion	Extension	Lateral inclination of Left/ right
Average final balance	64.7°	18.1°	26.2° / 26.5°

In This table are presented 36 cases, grouping by age group and initial and final balance, which seems clear improvement of muscular force and ROM using electrotherapy rehabilitation.

See Illustration 4

Conclusion

In this study we showed that patients with chronic lumbago treated with physiotherapy have significant improvements in the level of the pain, muscular force and articulated ROM were improved.

Patients in the opening balance muscular strength had grade 3 muscle and after 10 sessions of physiotherapy the final balance of muscular force becomes 6 grade muscular.

The ROM-articulated in the opening balance flexion is 48°, and then the final flexion balance becomes 64.7°.

The ROM-articulated in the opening balance extension average is 14.7° and we made extension final balance averaging 18.1°.

ROM articulated in the opening balance of lateral inclination is averaging 22.7°, the balance becomes final average 26.5° inclination.

Patients who use medication for pain relieve had improvement only for a short time, and had to take again these preparations, which are often associated with side effects such as drug allergies, HTA, gastritis etc..

Most of the patients followed a physiotherapy rehabilitation for a 2-week period and all reported that the level of the pain was decreased, improvement of muscular force and increased amplitudes and prevention of articular surgical intervention.

Based on these reports we conclude that: Rehabilitation Physiotherapy is the proper treatment for chronic lumbago, because improves the condition of patients, CLE and has no side effects.

It is recommended to perform physiotherapy twice in year.

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Illustrations

Illustration 1

Table 1

Parametres	Ultrasound	Magnetotherapy+ Infraso	Electrotherapy, Tensa
	Sesssions 1-3		
Time	15 minutes	20 minutes	15 minutes
Frequency	1 MHz	25 Hz	30 Hz
Potency	1.2 W/cm	40 Gauss	-
Frequency-Duty cicle	30%	50%	-

Illustration 2

Table 2

	Session 4-7		
Time	15 minutes	20 minutes	15 minutes
Frequency	1 MHz	50Hz	50 Hz
Potency	1.2 W/cm	60 Gauss	-
Frequency-Duty cicle	30%	60%	-

Illustration 3

Table 3

	Session 8-10		
Time	15 minutes	25 minutes	15 minutes
Frequency	1 MHz	80 Hz	70 Hz
Potency	2.2W/cm	80 Gauss	-
Frequency Duty-cicle	100%	80 %	-

Illustration 4

Table 4

Age group (years)	Nr.of patients	M/F	The effected Segment	Muscular force At the beginning of the treatment	Muscular Strength at the end of treatment	ROM before Treatment Articulated flexion/extension/inclination	ROM after treatment articulates flexion/extension/inclinatio
20-25	3	2/1	L4-L5	Rank 4	Rank 7	65° /17°/ 25°	80°/20°/28 °
26-30	5	2/3	L4-L5-L 5-S1	Rank 4	Rank 7	70°/15° / 23°	80°/18°/28°
31-35	4	2/2	L4-L5-L 5-S1	Rank 3	Rank 6	50° /15° / 25 °	75°/18° /30°
36-40	6	2/4	L3-L4-L 4-L5	Rank 3	Rank 6	40°/ 13° /22°	70°/18°/25°
41-45	8	5/3	L4-L5-L 5-S1	Rank 3	Rank 5	35°/12°/20°	50°/15°/25°

46-50	5	2/3	L3-L4-L4- L5,L5-S1	Rank 3	Rank 6	40°/15°/22°	55°/18°/25°
51-60	5	3/2	L4-L5;L5-S1	Rank 3	Rank 4	37°/16° /22°	43°/20°/25°
Average	**36**	**36**		**3**	**6**	**48°/14.7/°22.7°**	**64.7°/18.1/°26.5°**