

## THE RECOVERY OF PAINFUL SHOULDER TO SPORTSMEN THROUGH COMPLEMENTARY TECHNIQUES OF MASSAGE

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**ABSTRACT.** *Introduction:* The low value of muscular force of scapular belt favours the appearance of this pathology at sportsmen who practice repetitive activities in joint of shoulder. *Objective:* The presentation of importance of complementary techniques of massage in the programme of posttraumatic recovery of painful shoulder at sportsmen. The examination of efficiency of recovery programmes which include different complementary techniques of massage with indications in the posttraumatic painful shoulder. *Material and Method:* The pursuit and evaluation of a lot of sportsmen with posttraumatic painful shoulder who practice table tennis, using for recovery complementary techniques of massage. *Results:* After the treatment, the evolution was favorable in all 20 cases, supervening the complete healing. *Conclusions:* The complementary techniques of massage are indispensable in the treatment of posttraumatic sequelae for restoration of functionality of the affected segment. The major indication is at the patients to which is desired a recovery most complete and in a short period of time.

**Key words:** massage, complementary techniques, trauma, evaluation, physiotherapy

**REZUMAT. Recuperarea umărului dureros la sportivi prin tehnici complementare de masaj.** *Introducere:* Valoarea scăzută a forței musculare a centurii scapulare favorizează apariția acestei patologii la sportivii care practică activități repetitive în articulația umărului. *Obiective:* Prezentarea importanței tehnicilor complementare de masaj în programul de recuperare a umărului dureros posttraumatic la sportivi. Analiza eficienței programelor de recuperare care cuprind diferite tehnici complementare de masaj cu indicații în umărul dureros posttraumatic. *Material și metodă:* Urmărirea și evaluarea unui lot de sportivi cu umăr dureros posttraumatic care practică tenisul de masă, folosind pentru recuperare tehnici complementare de masaj. *Rezultate:* În urma tratamentului, evoluția a fost favorabilă, în toate cele 20 de cazuri, survenind vindecarea completă. *Concluzii:* Tehnicile complementare de masaj sunt indispensabile în tratamentul sechelelor posttraumatice pentru restaurarea funcționalității segmentului afectat. Indicația majoră este la pacienții la care se dorește o recuperare cât mai completă și în timp cât mai scurt.

**Cuvinte cheie:** masaj, tehnici complementare, traume, evaluare, fizioterapie.

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## Introduction

The complementary techniques of massage present an exclusive therapeutic addressability. Some of the most important indications of treatment in case of posttraumatic sequelae of a painful posttraumatic shoulder, are some of the most representative complementary techniques of massage:

- the profound transversal massage
- the subjunctive massage
- criomassage
- the reflex massage type of reflexology

The analyze of efficiency of programmes of recovery which include different complementary techniques of massage with indication in the posttraumatic painful shoulder.

## Materials and Methods

It was analysed the efficiency of programmes of recovery which include different complementary techniques of massage with indications in the posttraumatic painful shoulder.

- In the period 01.08.2011-01. 02. 2012 I effectuated an experimental study on a lot of 140 sportsmen who practice tabletennis, sportsmen having the age between 7 and 18 years old, students at Economic College Teodor Costescu from Drobeta Turnu-Severin. It was established the diagnostics of painful shoulder at 20 patients. The diagnostics was confirmed by family doctors, with the support of orthopaedist doctor.

- It has been noticed that in the studied period, the painful symptomoatology appeared at 14% of sportsmen.

The distribution of patients in function of age is reproduced in the next table.

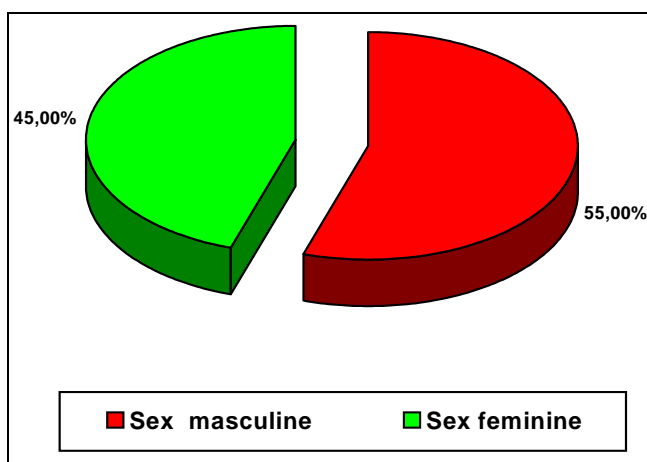
**Table 1.** - Age of studied cases

Age	Number cases	%
7 years	1	5
9 years	2	10
10 years	1	5
11 years	2	10
12 years	3	15
13 years	3	15
14 years	2	10
16 years	2	10
17 years	2	10
18 years	2	10

Repartition on sexes of cases from the analysed lot which indicates values aproximatively equal.

**Table 2.** -Repartition on sexes

<b>Sex</b>	<b>Number of cases</b>	<b>%</b>
Masculine	11	55
Feminine	9	45
<b>Total</b>	<b>20</b>	<b>100</b>

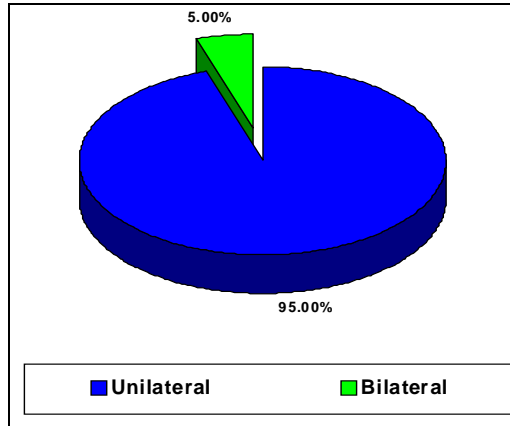


**Figure 1.** - Repartition on sexes of the studied lot

The affectionation of joint of the shoulder is dominant unilateral and şî correspond to the right shoulder for rightly, respectively to a left shoulder for the lefthanders.

**Table 3.** -The affectionation of the joint

<b>The affectionation of joint</b>	<b>Number of cases</b>	<b>%</b>
Unilateral	19	95
Bilateral	1	5
<b>Total</b>	<b>20</b>	<b>100</b>



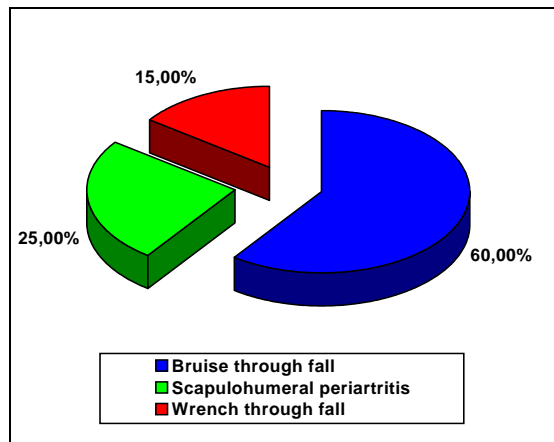
**Figure 2.** -The affection of the joint

It has been established next diagnostics:

- ✓ Bruise through fall – 12 cases;
- ✓ peri-arthritis scapulohumeral - 5 cases;
- ✓ wrench through fall - 3 cases.

**Table 4.** - Diagnostics

Diagnostics	Number of cases	%
Bruise through fall	12	60
Peri-arthritis scapulohumeral	5	25
Wrench through fall	3	15
<b>Total</b>	<b>20</b>	<b>100</b>



**Figure 3.** - Constant Diagnostics

## Results and discussions

For applying the techniques complementary of massage is necessary a very good control of the technique, but also the knowledge of the anatomy of the affected segment, from the point of view of the orientation of muscular fibers, or tendons, because the applyance of maneuvers is made ina strict way, well definided. Each orientation of the maneuvers of work determines a certain action on the visaed structures:

1. In the profound transverse massage the applyance of the, maneuvers is made strictly transverse on the muscular fibers, tendinouses sau tendons, and in orientation even oblique might limit the action on the visaed structures, involving in change other structures which we do not want to work. The effects of the technique are represented first by the locale hiperemy, assuring the elimiation of the substances algogenes. Because of the fact that the main maneuver used by the profound transverse massage is friction, another effect determined directly by this maneuver is tranquillizer-relaxing of the worked stuctures, respectively tendons, and muscles. The major effect,, is represented by the abolishment of the adherences from the posttraumatic sequelaes, which will not recover if the massage transverse profound will be followed by active mobilisations, contributing to the restoration of functionality of the affected segment.

2. In the conjunctive masage the applyance of maneuvers is made in log of structures mentioned above, and the used maneuveres differ by the ones applied in the case of massage transverse profound. The main maneuver is here the flattening with high pressure and applied only with the pulp of policel or of index and of medius, so at surface of contact very reduced. The areas of applyance of the maneuvers are the ones that present reflexes at the level of the conjunctive tissue of type of retracts, interpreted like broaded tape or like aligned orbs like „beads on the rope”, set off at he level of the skin. The major effect is the hiperemiant local, which not only that „washes” the area of the proinflamatory and algogenes substances, but also favours reorganisation of the conjunctive fibers. Another important is the reflex one, which act not only local, but also at distance, the modification itself being determined by the different request of some structures with the purpose of protectios of the affected area of trauma.

3. The reflex massage of the type ofreflexology presents meanings of work wellcoded, which depend by the reflex area of projection approached. The basics maneuvers are the associated digital pressure, in function of case, with the friction, the slide or the vibration. The concerned effects through reflexology, in the case of posttraumatic sequelaes, are the ones reffering to the removal of pain through stimulation of elimination of algogenes substances in the reflex way.

The appliance of the techniques complementary of massage in the treatment of posttraumatic sequelaes imposes the knowledge of the way of positioning of the patient, in such a way that he could display the concerned structures, sometimes even to put in tension (tendons) or to relax them(musculature). It

was noticed that the exclusive use of physio-physiotherapy extends the period of recovery in the case of posttraumatic sequelae, especially of the adherent ones, and the restitution of functionality is not complete, comparing with the programmes which include at least one of the complementary techniques of massage along with physiotherapy. This is due to the fact that not even the passive extension, not even the muscular contraction cannot remove the adhesions which embarrasses the free fall of fibers between them, even if they are muscular, tendinous or tendons.

The first step in „abolishment” of posttraumatic sequelae would be represented by the complex massage through complementary techniques, which can be mingled to reduce the painful phenomenon (criomassage, reflexology) and to increase the local circulation, which would emphasise the elimination of the active substance (pain substance), responsible of chronicisation of the local pain (the transverse profound massage, the conjunctive massage).

The effects are argued by the mingle of these techniques with the complementary electrotherapy represented by ultrasounds and electromagnetics emanations. We must take into account that in the case of posttraumatic sequelae exist a touch of the proprioceptive information and that during a global activity the subject avoids the request of affected structures, producing moving modified schemes which tend to last. Thus, the removal of the painful sequelae will prepare the reversion to a normal kinetic behaviour, this actually being the main purpose of progressive cinetotherapy part from the programme of recovery of posttraumatic sequelae. The means that compose this programme can be made only together, by summing the effects of each one, the functional reharmonization, through averting of primary disturbed afferents.

Through the way of appliance and the modifications of the clinic tableau appeared during the application, the complementary techniques of massage can signalise the presence of a serious masked injury, which can benefit of a correct treatment after a new medical evaluation. For example, a pain that does not stop to increase during the massage session represents a signal to stop until a new medical evaluation.

After the treatment, the evolution was favorable in all 20 cases, occurring the complete healing. At the diagnostics of bruise and scapulohumerous peri-arthritis, the healing was produced in maximum 2 weeks, and in all 3 cases of wrench, in the most 30 days.

## **Conclusions**

1. The complementary techniques of massage are indispensable in the treatment of posttraumatic sequelae, for restoration of the functionality of the affected segment. The major indication is at the patients to whom is desired a recovery complete and in a short period of time.

2. The law value of the muscular force of the scapular belt favours the appearance of this pathology at the sportsmen who practice repeated activities in the joint of the shoulder.

3. The painful shoulder at the tabletennis players appear dominant unilateral.

4. The biggest incidence was made by trauma bruise, the fall on the affected shoulder in percent of 60%.

5. The practiced techniques (the profound transverse massage; the conjunctive masage; criomassage; the reflex massage of type of reflexology) had following good results:

- the combatation of the pain and of the inflammation;
- the combatation of articular restoration;
- the redo of the articular mobility;
- the redo of flexibility and of muscular force;
- the gestuous recovery of the articulation of the shoulder.

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