199 - FUNCTIONAL EVALUATION OF THE POS-SURGICAL OF TEAR IN THE ROTATOR CUFF THROUGH THE SCALE OF THE UNIVERSITY OF CALIFORNIA, IN LOS ANGELES (UCLA)

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INTRODUCATION

The several alterations in the shoulder that manifest themselves through pain and functional limitation, especially when doing above-head activities are called Impact Syndrome or Impingement (SI)[1]. This syndrome presents multifactor etiology, representing more than 50% of all examinations related to the superior member; Thus it can be seen[2] that the more common causes are, the tendonitis of the muscles of the rotator cuff, the bursitis, the tendons ruptures, alteration of the long head of the biceps, lip tears and the calcifications.

This syndrome can be divided according to its etiology[3], in Primary Impact (divided into 03 stages) and Secondary Impact, defined as relative reduction of the subacromial space due to the scapulathorax ou glenhumeral functional instability .

The surgical treatment offers a possibility of relief of the pain and, possibly the prevention pf chronic alterations[4]

Authors [5,6] describe the final result of the forms of surgical treatment as similar along time, however, there is clear superiority of the arthroscopic procedures.

Relating to the physiotherapeutic treatment it can be observed that the physical agents like ultrasound, laser, short waves, TENS besides ice can be used in the rehabilitation[7].

The kinetic therapy is the important part of the treatment , and in the program of rehabilitation , the physiotherapist should include stretching exercises with the goal of maintaining and recuperating the motion ranges, and strengthening exercises for the rotator cuff, scapular stabilizers and afterwards for the deltoid[8] muscle.

METHODS

The universe of this study embraces adult people submitted to surgical treatment due to the tears of the rotator cuff with the same surgeon that used the mini-open surgical repair and that had physiotherapeutic treatment in the Clinica Reabilitar, situated at 500 Andrades Street, in the city of Fraiburgo - SC, Brasil, in 2005.

The sample was made up of 20 people from both sexes, 14 women(70%) and 6 men(30%), 29-to-73 age group. The physiotherapeutic treatment done in these people was adapted according to the surgical technique that was used, based on the extension of the repair and on the tissue muscle quality. The rehabilitation was divided into four phases. The phase I, relating to the inflammation and the pain control , was used: ice therapy (4 to 6 times/day - 20 to 25'), short waves - pulsated (F- till 80Hz), ultrasound pulsated, TENS, Codman pendulous exercises, relaxation of the muscles of the cervical column and the scapular waist. The phase II consisted of the restoration of the articulator range, all the articulations of the shoulder complex were worked through the mobilization techniques and exercises of restoration of the global motion of the shoulder using long plastic stick and pulley. The phase III preconized the muscular strengthening, with isometric exercises, progressing with theraband or elastic tube till the realization of isotonic with halters. Finally, in the phase IV, it was tried to obtain the maintenance of the complete and painless motion range, the improvement of the strength and the recuperation of the neuromuscular balance, allowing the return to the functional activities. For that, it was used shut kinetic chain, exercises of pliometria and maintenance program.

RESULTS:

The interdisciplinarily currently attributed to the patients with tears in the rotator cuff, allowed us to use the UCLA scale, making it possible to perceive the identification of the possible alterations of the articulation functionality of these individuals.

To obtain the data, a descriptive statistic analyses of the data of the UCLA scale was conducted, proposing the evaluation taking in consideration the pain, the function, the mobility, the muscle strengthens and the level f satisfaction.

Next, the collected data that were analyzed using the scale of the *Universidade of Califórnia in Los Angeles (UCLA)*.

Chart 1- Total results using UCLA scale

UCLA	Frequency	%
Poor	5	25
good	6	30
Excellent	9	45
Total	20	100

Two factors clearly influence in the good results[9], the first is the good health conditions of the patients and the second is the will and disposal of these people to recover, making them cooperate intensively in the post-surgical rehabilitation, following strictly the medical and physiotherapeutic orientation. Still, the consciousness of the patient relating to the surgical procedure and the expected result are also important factors to reach good results.

The success of the surgical procedures on the shoulder can be attributed to four basic principles: 1) careful choice of the patient, that should be very motivated and cooperative; 2) clarification of the patient, by the interdisciplinary team, relating to the prognostic and duration of the rehabilitation time; 3)Fine technique and precocious beginning of the rehabilitation process; 4) Constant reevaluations and within short periods, by the interdisciplinary team. The information passed by the physician to the physical therapist about the surgical act and those information he/receives from him/her relating to the all process of physiotherapeutic treatment, contribute a lot to the success and high rates of good results[10].Y

Relating to the satisfaction level, 85% of the member of the sample considered themselves satisfied and 15% considered themselves not satisfied, as exposed in the chart 2.

Chart 2 - level of satisfaction of the members of the sample

Level o satisfaction	frequency	%
Satisfied	17	85
Dissatisfied	03	15
Total	20	100

It's pointed out that, despite of the rate of excellent and good results reach the percentage of 75% of the cases, the rate of the final satisfaction was of 85%. It is explained by the fact that some patients didn't reach the adequate functional recuperation, even so the relief of the pain was enough to declare themselves satisfied.

For patients in general, the capacity of elevating completely and actively the operated superior member without feeling pain, means satisfactory functional recuperation, mainly because the age average corresponds to a population group whose job with great physical efforts is not the rule.

In this sense, it's observed that the rate of 85% of satisfaction of the patients with the surgical and rehabilitative result corroborate the finds in the literature, but in a objective angle, in a strict evaluation of the strengthen recuperation, doesn't have that percentage correspondence, being similar to the reports in recent literatures that follow.

In a study to evaluate the muscular strength and function on the shoulder after the repair of the rotator cuff, thirty-eight patients were analyzed, where 77,6% considered themselves satisfied with the surgical result, 12,2% said they were fairly satisfied, having as a justification, in both groups, the unsatisfactory recuperation of the muscular strength , but not the presence of pain.

In a series of 67 shoulders with complete tear , it was published 71.6 %

of satisfactory results in the repairing of the rotator cuff by open via. Other authors published similar rates with a variation of around 80% of satisfactory results[12].

Using also the classification UCLA, it was described the rate of 90,8% of excellent and good results in the studies on surgical arthroscopy in the treatment of the impact syndrome with 100 cases, 7,7% as reasonable and 1,5% as bad results.

In the impingement surgical treatment of the rotator cuff of the shoulder through the decompression of the subacromial, the rate of satisfaction was 87% and 13% of dissatisfaction in a sample of 39 patients of both sexes.

In the evaluation of 206 mini-open repairs[9] in tears of rotator cuff In 198 patients of both sexes, all operated by the same surgeon and all having rehabilitation with physiotherapeutic program with average duration of 12 months, the final results through UCLA showed rate of excellent results in 111 cases(53,88%), good results in 76 cases(36,89%), reasonable in 14(6,80%) and 5 cases as bad results(2,43%). The rate of final satisfaction was 96,60%, considering that according to the author, several complications can occur in the post-surgery period of mini-open repairs of the rotator cuff .

In a published study about the surgical treatment of the extensive tears of the rotator cuff through deletopeitoral access via, with 12 patients from both sexes, it was obtained 11 satisfactory results obtained and just one bad result. The patient that obtained bad result presented complete tear of all tendons of the rotator cuff and of the long head of the biceps, in addition to tear of the axillary's nerve[14].

Among the analyzed cases in the present study, three patients (15%) claimed they were totally dissatisfied after the mini open repair of the rotator cuff. One of the cases presented total rupture of the rotator cuff and after the surgery didn't show good evolution due to the lack of cooperation in the physiotherapy sessions (10 total sessions) caused by personal problems. The other two bad results were obtained in patients that besides not following the post-surgery rehabilitation, were claiming for compensation settlement, temporarily suspended of their functions at work and, probably, interested in staying in this condition.

In this way, patients with litigious compensation problems may present bad results jeopardizing the final result[7].

Better results would be found if a strict selection of the surgical cases were done, not including, for example, those patients protected by social security of the on-the-job accidents, that tend not to have a good evolution[15]. In this way, it is described yet, that in a sample of 46 individuals, both sexes, it was obtained 86.9% of satisfaction with excellent and good results in surgeries for subacromial decompression of the shoulder trough video arthroscopy. Most of the excellent and good results were back to their activities in six weeks, however they continued with the rehabilitation for four months more. Among the reasonable, all 5 patients were under protection of on-the-job accident insurance. Only, one case as good result, evolved to adhering capsulate with important functional limitation. .

Despite of the growing surgical volume, we still face the problem of the delay in the time of rehabilitation of operated patients. Despite of the correct prescription of post-surgical exercises, the recommendation to physiotherapy is done tardy and there is still a hiatus of time reasonably long until the admission in the physiotherapy service, due the big existent demand. Another aggravating factor is the tendency of the patients, even previously well oriented, of not doing movements with the operated member and of maintaining it close to the body. That occurs particularly with the middle age patients, the elderly and those physiological depressed[17].

The patient should be pretty aware of its role in the obtaining of the best possible results, cooperating intensively in its post-surgery rehabilitation.

CONCLUSION

The results found in this study according to its limitations conduct us to assure that individuals submitted to surgical treatment due to tears of the rotator cuff presented the rate of 75% of satisfaction , with 30% of individuals showing good results and 45% showing excellent results.

The interdisciplinarity required in the tear of the rotator cuff allowed us to

understand better the application of physiotherapeutic resources in the search for results that contemplated the quality of life of these individuals.

The use of physiotherapeutic treatment was proposed in order to check the existence of kinetic-functional alterations, although due to the reduced number of individuals it's not possible to generalize the results. Therefore, by what it was showed in the finds, these lead us to the validity of this study.

We also got to the conclusion that the surgical treatment of the rotator cuff associated to the correct physiotherapeutic treatment, permits good results and has high rate of satisfaction of patients relating to the final result.

The benefits of the surgery are evident when it comes to the relief of the pain and improvement of the functions in the daily activities; the real expectancy of the treatment concerning to the surgical as much as the rehabilitating treatment,

should be explained to the mini open repair of the rotator cuff candidate patient, specially when they have extensive tears.

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FUNCTIONAL EVALUATION OF THE POS-SURGICAL OF TEAR IN THE ROTATOR CUFF THROUGH THE SCALE OF THE UNIVERSITY OF CALIFORNIA, IN LOS ANGELES (UCLA)

ABSTRACT:

INTRODUCTION: The several alterations that occur on the shoulder and manifest themselves with pain and limitation, are called Impact Syndrome. This syndrome presents multifactor etiology and it can be divided according to its etiology into Secondary and primary impact. The current treatments to patients with tear in the rotator cuff see the surgery and the physiotherapy as important tools for checking the therapeutic results, because they try to minimize possible pos-treatment kinetic-functional disorders. **GOAL** : To evaluate the functionality of the shoulder in adult individuals submitted to surgical treatment due to tears in the rotator cuff; **METHODS :** It was used the functional scale of the *University of Califórnia, Los Angeles* (UCLA). The sample of this study was made up of 20 individuals of both genders, age between 29 to 73, submitted to surgical treatment, due to tears of the rotator cuff with the same surgeon, using the mini-open repair and that had physiotherapeutic treatment in the year of 2005. **RESULTS**: The results found point to high total levels of the scores where it was observed that 30% indicated good level and 45% excellent, totalizing 75%,. Relating to the satisfaction level, 85% of the sample indicated to be satisfied. **CONCLUSION:** The surgical treatment of the Rotator cuff, associated to the physiotherapeutic treatment using physical resources: Ultrasound scan, Short waves, TENS e kinetic therapy has good results and gets high level of satisfaction from patients after the rehabilitation.

Key - words: functionality; rotator cuff; surgical treatment and physiotherapeutic.

ÉVALUATION FONCTIONNELLE DU POST-CLIRURGICAL DÛ LÉSIONS DU MUSCULAIRE ROTATIF L'ÉPAULE UTILISÉE L'ECHELLE DE UNIVERSITY OF CALIFORNIA AT LOS ANGELES (UCLA)

Résumé

INTRODUCTION: Les divers handicapes qui ancernent l'èpaule et qui se manifestent par la douleur et la limitation fonctionelle sont effelés Syndrome de l'impacte. Le syndrome presente une étiologie multi-factoriale ponvant etie divisée en impacte primitif e impacte segondaire. Les traitements actuels pour les personnes surffrant du faiscean musculaire de l'épaule se rapportent sur la chirurgie et la physiotérapie comme importants mojens pour la verification des résultats therapeutiques puis qui la tentent a minimiser les possibles desordres cinético-fonctionnels post-traitement. **OBJECTIF:** Evaluer lê fonctionnement de l'èpaule des personnes adults sourmises an traitement chirurgique de musculaire rotatif l'épaule. **HÉTHODES:** Ha été utilisée l' echelle fonctionelle de l' University of California at Los Angeles (UCLA). L' essai cette étude e été fait sur 20 patients des deux sexes agés de 29 a 73 ans, sourmis an traitement chirurgique, opere par la même chirurgieu em chirurgie ouverte, se traitent de faiscean musculaire rotatif l'épaule, et parallelement par physiotérapie en 2005. **RÉSULTATS:** Les résultats obtences an eteis satisfaisants, d'un score élevé puis que 30% de patients sont classés bons, 45% excellent sur un total de 75%, an point de vu satisfaction 85% des essais qui ont été relatés, l' ont été. **CONCLUSION:** Woer parvons conclure que le traitement chirurgique du faiscean musculaire rotatif de l'èpaule, associé an traitement eut physioterapique, utilisant des majeus physiques tels que ultra-son, ondas courtes, TENS e cinesioterapie, offrent de bons résultats avec un haut indice de satisfaction des patients aprés la rehabilitation. **Most-clés:** fonctionnement; musculaire rotatif de l'èpaule; traitement chirurgical e physioterapeutique.

EVALUACIÓN FUNCIONAL DE EL POST-OPERATORIO DE LESIÓN DEL MANGUITO DE LOS ROTADORES A TRAVÉS DE LA REFERENCIA DE LA UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Resumen:

INTRODUCCIÓN: Las diversas alteraciones que recibe el hombro y que se manifíestan con dolor y limitación funcional, son denominadas síndrome del impacto. Este síndrome presenta etiología multifactorial, pudiendo ser dividida a partir de su etiología en el impacto primario y secundario. Los tratamientos actuales para pacientes con lesión del manguito de los rotadores hacen foco en la cirugía y en la fisioterapia como importantes instrumentos para la verificación de los resultados terapéuticos, ya que intentan minimizar posibles desórdenes cinético-funcionales en el post-tratamiento. **OBJETIVO:** Evaluar la funcionalidad de el hombro de individuos adultos sometidos a tratamientos quirúrgicos devido a las lesiones del manguito de los rotadores. **MÉTODO:** Fueran utilizados como referencia funcional de la University of California at Los Angeles (UCLA). La muestra de este estudio fue compuesta por 20 pacientes de ambos géneros, con edades que oscilan entre 29 y 73 años, sometidos a tratamiento quirúrgico, devido a las lesiones del manguito de los rotadores con el mismo cirujano, utilizando la reparación quirúrgica abierta y que ademas realizaron tratamiento fisioterapéuticos en el año 2005. **RESULTADOS:** Los resultados encontrados apuntan para niveles totales altos en los registros donde se observó que el 30% indicaba un nivel bueno y el 45% excelente; totalizando un 75%, que en relación al 85% del nivel de satisfacción de la muestra original indicó estar satisfecho. **CONCLUSIÓN:** Se conclurjó que el tratamiento quirúrgico del manguito de los rotadores asociado al tratamiento fisioterapéutico y utilizando recursos físicos como: ultra-sonido, ondas cortas, NET y kinesiterapia, oferece buenos resultados y tiene un alto índice de satisfacción por parte de los pacientes después de la rehabilitación.

Palabras- chaves: funcionalidad; manguito de los rotadores; tratamento quirúrgico y fisioterapéutico.

AVALIAÇÃO FUNCIONAL DO PÓS-OPERATÓRIO DE LESÃO DO MANGUITO ROTADOR ATRAVÉS DA ESCALA DA *UNIVERSITY OF CALIFORNIA AT LOS ANGELES (UCLA)*

Resumo:

INTRODUÇÃO: As diversas alterações que acometem o ombro e que se manifestam com dor e limitação funcional, são denominadas Síndrome do Impacto. Esta síndrome apresenta etiologia multifatorial, podendo ser dividida quanto a sua etiologia em Impacto Primário e Secundário. Os tratamentos atuais para sujeitos com lesão de manguito rotador focalizam a cirurgia e a Fisioterapia como importantes instrumentos para a verificação dos resultados terapêuticos, pois tentam minimizar possíveis desordem cinética-funcional pós-tratamento. **OBJETIVO**: Avaliar a funcionalidade do ombro de indivíduos adultos submetidos a tratamento cirúrgico devido lesões do manguito rotador; **METODOS**: Foram utilizados a escala funcional da *University of California at Los Angeles* (UCLA). A amostra deste estudo foi composta por 20 sujeitos de ambos os gêneros, com idades entre 29 e 73 anos, submetidos a tratamento cirúrgico, devido a lesões do manguito rotador com o mesmo cirurgião, utilizando a reparação cirúrgica aberta e que realizaram tratamento fisioterapêutico no ano de 2005. **RESULTADOS**: Os resultados encontrados apontam para níveis totais altos dos escores onde observou-se que 30% indicaram nível bom e 45% excelentes, totalizando 75%, já em relação ao nível de satisfação 85% da amostra indicaram estar satisfeitos.**CONCLUSÃO**: Concluiu-se que o tratamento cirúrgico do manguito rotador associado ao tratamento fisioterapeutico utilizando recursos físicos como: Ultra-Som, Ondas Curtas, TENS e Cinesioterapia, oferece bons resultados e tem alto índice de satisfação dos pacientes após a reabilitação.

Palavras - chave: funcionalidade; manguito rotador; tratamento cirúrgico e fisioterapeutico.