91 - EVALUATION OF THE QUALITY OF LIFE IN ADULT INDIVIDUALS SUBMITTED TO SURGICAL TREATMENT DUE TO TEARS OF THE ROTATOR CUFF.

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INTRODUCTION

The anatomy of the articulation complex of the shoulder permits extensive range of motion. However, the high degree of mobility requires some damaging of the stability, what on its turn, increases the vulnerability of the articulation of the shoulder to the tear, especially in the activities that include dynamic motion[1].

The several alterations in the shoulder manifest themselves through pain and functional limitation, especially when doing above-head activities that are called Impact Syndrome or Impingement (SI)[2]. This syndrome presents multifactor etiology, representing more than 50% of all examinations related to the superior member; Thus it can be seen[3] 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[4] can be divided ,according to its etiology, 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 .

Authors [2,5] describe that the syndrome of the impact and the tears of the rotator cuff are very frequent and disabling, coming to be a diagnostic that it is more and more common to patients with pain on the shoulder, the pain usually hits the pain arch of elevation of the superior member between 70° and 120° e and in several situations: at night, interfering in the sleep; during the rest, interfering in the daily activities; in the efforts it is continuous , jeopardizing seriously the quality of life of the patient.

At this point, the signals and the symptoms as pain, reduction of the range of motion, painless attitude, may negatively influence in the life of a person, taking him/her to the isolation and little participation in the social life, contributing to the worsening in the quality of life[6].

The surgical treatment offers the possibility of relief of the pain, and, possibly the prevention of chronic alterations[7], and the final result of the forms of surgical treatment is similar along time, however, there is clear superiority of the arthroscopic procedures[2,8].

It's observed that the physiotherapeutic procedures contribute directly to the success of the final results of the treatment[9].

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 gender , 14 women(70%) and 6 men(30%), 29-to-73 years old. 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 , and it 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 interdisciplinarity currently attributed to the patients with tears in the rotator cuff, allowed us to perform tests and questionnaires, making it possible to perceive the identification of the alterations in the quality of life of these people by applying the questionnaire WHOQOL-BREF, version in Portuguese, source O.M.S. 1998.

To reach the goals proposed, a descriptive statistical analyses of the socio demographic and clinic data of the WHOQOL-BREF was conducted, trough the calculation of the average, standard deviation , proportions and inferential analyses by means of the trust interval. In addition to these analyses, the *Shapiro-Wilk* test was used to evaluate the psychometric properties and significance of the *WHOQOL-BREF.*

Relating to the current health status of the sample; 60% of them evaluated it as good; 25% as very good, 10% as poor and 5% evaluated them as neither good nor bad, as can be seen in the chart 1.

Health status	Frequency	%
Good	12	60
Very good	5	25
Poor	2	10
Neither good , nor bad	1	5
Total	20	100

O *WHOQOL-BREF*, is an instrument that presents satisfactory characteristics of internal consistence, discriminating validity , criteria validity, competitor validity and test-retest fid dignity. Also evaluating a good psychometric performance with sensible use what makes it a useful alternative to be used in studies that want to evaluate the quality of life in Brasil[10].

Below the Chart 2 shows the calculation of the average, interval of trust, standard deviation, the minimum values and the maximum, and *Shapiro-Wilk* test of domain 1.

Chart 2 - Description of statistic values of DOMAIN 1.

Average	55.71
Interval 95% of trust	Inferior limit 50.44
	Superior limit 60.98
Standard deviation	11.25
Minimum	32.14
Maximum	78.57
Shapiro-Wilk test	0.386

The chart 3, contains the data relating to the average, interval of trust, standard deviation minimum and maximum values and *Shapiro-Wilk test Domain 2.*

Average	56.43
Interval 95% of trust	Inferior limit 49.86
	Superior limit 63.00
Standard deviation	14.04
Minimum	33.33
Maximum	83.33
Shapiro-Wilk test	0.674

The chart 4 shows de statistic description of the average , interval, of 95% of trust, standard deviation , minimum and maximum values and *Shapiro-Wilk* test Domain 3.

Chart 4 - Description of the statistic values Domain 3.

Average	74.58
Interval of 95% of trust	Inferior limit 67.83
	Superior limit 81.33
Standard deviation	14.42
Minimum	50.01
maximum	100.01
Shapiro Wilk test	0.080

Chart 5 contains the statistic values of the average, trust interval, standard deviation, maximum and minimum values and the *Shapiro-Wilk* test Domain 4.

Chart 5 - Description of the statistic values of the Domain 4

Average	56.76
Interval of 95% trust	Inferior limit 50.83
	Superior limit 62.69
Deviation standard	12.67
Minimum	34.50
Maximum	78.12
Shapiro-Wilk test	0.559

Following up the *Shapiro-Wilk* test data of all domains, which showed that there were no statistically meaningful difference between the domains , so it wasn't found any alteration in the quality of life of these people, as exposed in the Chart 6.

Chart 6 - psychometric properties of the domains:

Domains	*Shapiro-Wilk*		
	Statistic	Sample	p
Domain 1 (physical)	0.948	20	0.386
Domain 2 (psychological)	0.968	20	0.674
Domain 3 (social relations)	0.914	20	0.080
Domain 4 (Environment)	0.962	20	0.559

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

Among the surveyed people, relating to the total scores of the scale, it can be observed that 25% of the sample presented poor rate, 30% good rate and 45% excellent rate as showed in the chart 7.

Chart 7 - 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, 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 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.

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 8.

Chart 8 - level of satisfaction of the members of the sample

Level of 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, [11] 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 UCLA classification, 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.

The mini-open repair of the rotator cuff is a procedure that provides high rates of good and excellent results, as demonstrated in the medical literature and, with the improvement of the surgical techniques, even the older patients have the possibility of obtaining satisfactory results with this procedure.

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 realized 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.

It's emphasized that the patient should be really aware of its role in order to obtain the best possible result, cooperating intensively in its post-surgery rehabilitation.

CONCLUSION

The results found in this study according to its limitations lead us to assure that the individuals submitted to surgical treatment due to tears in the rotator cuff didn't present alteration in the quality of life according to the analyses of the questionnaire *WHOQOL-BREF*.

The physiotherapeutic treatment was proposed in order to minimize the functional-physical alterations that could interfere in the quality of life of the individuals, although due to the reduced number of people its not possible to generalize the results. This way, by what has been showed in the finds, they lead to the validity of this study, assuring the following conclusions:

There was no difference statistically meaningful in the domains of *WHOQOL-BREF*; It was observed that the current conditions of health of the individuals, obtained total 85% of satisfaction with the results;Relating to UCLA, we had 30% of good and 45% of excellent results. The interdisciplinarity required in the tear of the rotator cuff allowed us to understand better the application of the physiotherapeutic resources in the search for results that contemplated the quality of life of these individuals. We 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, since In this study, it was reached 85% of satisfaction. Our casuistry is small to generalize conclusions from this study, however, its level of significance is assured since all the patients were treated by the same surgeon, with the same criteria of diagnose, same technique of examination and physiotherapeutic rehabilitation.

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EVALUATION OF THE QUALITY OF LIFE IN ADULT INDIVIDUALS SUBMITTED TO SURGICAL TREATMENT DUE TO TEARS OF THE ROTATOR CUFF.

Abstract:

INTRODUCTION: The tears of the rotator cuff occur with a considerable part of the population, accounting for 11 to 25% of the patients treated in physiotherapy clinics. The current treatments focus on the surgery and the physiotherapy as important instruments to check out the therapeutic results. However, these measures, are sometimes not sufficient and the patients continue having functional-kinetic problems after the treatment. **GOAL**: to evaluate the quality of life of adult individuals submitted to surgical treatment due to tears of the rotator cuff; check out the results of the physiotherapeutic and surgical treatment after the surgery of tears in the rotator cuff and its influence on the quality of life. **METHODS**: The methods that were used are: the the quality of life evaluation questionnaire from *World Health Organization Instrument of Assess Quality of Life - Bref (WHOQOL-BREF) and the functional scale from the University of California at Los Angeles (UCLA)*. The sample was made up of 20 people of both genders,

between 29 and 73 years old, submitted to surgical treatment, due to tears of the rotator cuff with the same surgeon, using the mini-open repair and who received physiotherapeutic treatment in the year of 2005. **RESULtS:** The results found in the accounting of the data of the questionnaire *WHOQOL-BREF* showed there to be no statistical difference in the physical, Social relation, psychological and Environment domains. The UCLA scale identified level of satisfaction in functionality in 85% of the individuals. **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 of the patients relating to the final results, since in 85% of the sample showed good satisfaction level(30%) and excellent (55%), in this way no alteration of the quality of life of these patients were found.

Key - words: quality of life; rotator cuff; surgical treatment.

ÉVALUATION LA QUALITÉ DE VIE DES INDIVIDUS ADULTS SOURMIS E UN TRAITEMENT CHIRURGICAL DÛ LÉSIONS DÛ MUSCULAIRE ROTATIF DE L'ÉPAULE

Résumé:

INTRODUCTION: Les lésions du faiscean musculaire rotatif de l'épaule handicapent une importante partie de la population. Les traitements actuels se concentrent sur la chirurgia et la physiotérapie comme étant d' importants instruments pour verifier les résultats thérapeutiques. Pourtant ces mesures ve sont souevent pas suffisants et les patients continuent d' avoir des handicapes d' ordre cinético-fonctionnel aprés le traitement. **OBJECTIF:** Evaluer la qualité de vie des individus adultes sourmis e un traitement chirurgical dû ause lèsions du faiscean musculaire rotatif' de l' épaule. Vérifice les résultats du traitement chirurgical et physiotérapique aprés la chirurgie de la lésion et de su influence sur la qualité de vie. **HETHODES:** Ha été utilisés des questionnaires d' évaluation de qualité de vie de la World Health Organization Instrument of Assess Quality of Life (WHOQOL-BREF) et e'échelle fonctionnelle de University of California at Los Angeles (UCLA). L' expérience a été composeé de 20 patients deux sexes agés de 29 a 73 ans sourmis a un traitement chirurgical dû lésions de musculaire rotatif e'épaule et opérés par le même le chirurgieu par la méthode de chirurgie ouverte et qui auparavant avaient subis en traitement physiotérapique en 2005. **RÉSULTATS:** Les résultats obtences en sommant les données du questionnaire WHOQOL-BREF demontrairent aacerne différence dans les domaines physique, relations sociales, milien-ambient e psicologique, cepeudant á l' èchelle de UCLA an a identifié un niveau satisfaisant par rapport aux mouvements dans 85% des cas. **CONCLUSION:** Woes parvons conclure que traitement chirurgique de rotatif musculaire de l'èpaule associé an traitement physiotárapique utilisant des hethodes physique comme: ultra-son, ondes courtes, TENS e cinesioterapie, permettent d' obtenir de bons résultats et présentent un indice de haute satisfaction des patients en relation an résultat final, puis que 85% des patients observés prisent esent, 30% de sorlagement bon, et 55% execellent, leur qualité de vie vu fut pas altérée.

Mots-clés: qualité de vie; musculaire rotatif de l'épaule; traitement chirurgical

EVALUACIÓN DE LA CALIDAD DE VIDA EM INDIVIDUOS ADULTOS SOMETIDOS A UM TRATAMIENTO QUIRÚRGICO DEVIDO A LAS LESIONES DEL MANGUITO DE LOS ROTADORES

Resumen:

INTRODUCCIÓN: Las lesiones del manguito de los rotadores ocurren en una considerable parte de la población, registránolose de 11 a 25% de los pacientes tratados en clínicas de Fisioterapia. Los tratamientos actuales hacen foco en la cirugía y la fisioterapia como importantes instrumentos para la verificación de los resultados terapéuticos. Pero estas medidas muchas veces no son suficientes y los pacientes continuan sintiendo problemas de orden cinético-funcional después del tratamiento. **OBJETIVO:** Evaluar la calidad de vida de pacientes adultos sometidos a tratamiento quirúrgicos de la lesión y fisioterapéuticos después de la cirugía de la lesión del manguito de los rotadores y su influencia en la calidad de vida. **MÉTODOS:** Fueron utilizados cuestionarios de evaluación de calidad de vida de la World Heath Organization Instrument of Assess Quality of Life (WHOQOL-BREF) y la referencial funcional obtenida por la University of California at Los Angeles (UCLA). La muestra fue compuesta por 20 de ambos géneros, com edades que oscilabam 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 realizaron tratamiento fisioterapéutico en el año 2005. **RESULTADOS:** Los resultados encontrados en la computación de los datos obtenidos a través de el questionario WHOQOL-BREF demuestran que no hay diferencia estadística en los siguientes aspectos: físico, relaciones sociales, meio-ambiente y psicológico pero la referencia obtenida por la UCLA identificó un nível de satisfacción correspondiente a una funcionalidad en el 85% de los pacientes.**CONCLUSIÓN:** Se conclurjó que el tratamiento quirúrgico de el manguito de los rotadores, asociado al tratamiento fisioterapéutico utilizando recursos físicos como: ultra-sonido, ondas cortas, NET y kinesiterapia, permite obtener buenos resultados y presentar un alto índice de satisfacción de los pacientes con relación al resultado final, se verifica que en el 85% de la muestra obtuvieron un nivel de safisfacción bueno en un 30% y excelente en un 55%, en este sentido no se encontró ninguma alteración de la calidad de vida de estos pacientes.

Palabras-chaves: calidad de vida; manguito de los rotadores; tratamiento quirúrgico

AVALIAÇÃO DA QUALIDADE DE VIDA EM INDIVÍDUOS ADULTOS SUBMETIDOS A TRATAMENTO CIRÚRGICO DEVIDO LESÕES DO MANGUITO ROTADOR

Resumo:

INTRODUÇÃO:As lesões do manguito rotador acometem uma considerável parcela da população, contabilizando de 11 a 25% dos pacientes tratados em clinicas de Fisioterapia. Os tratamentos atuais focalizam a cirurgia e a fisioterapia como importantes instrumentos para a verificação dos resultados terapêuticos. No entanto, estas medidas muitas vezes não são suficientes e os sujeitos continuam a experimentar problemas de ordem cinético-funcional após o tratamento. **OBJETIVO**: Avaliar a qualidade de vida de indivíduos adultos submetidos a tratamento cirúrgico devido lesões do manguito rotador; verificar os resultados do tratamento cirúrgico e fisioterapêutico após a cirurgia de lesão do manguito rotador e sua influência na qualidade de vida. **METODOS**: Foram utilizados questionário de avaliação de qualidade de vida da *World Health Organization Instrument of Assess Quality of Life - Bref (WHOQOL-BREF)* e a escala funcional da *University of California at Los Angeles (UCLA)*. A amostra 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 na computação dos dados do questionário *WHOQOL-BREF* demonstraram não haver diferença estatística nos Domínios Físico, Relações Sociais, Meio-Ambiente e Psicológico já a Escala da UCLA identificou nível de satisfação com a funcionalidade em 85% dos sujeitos. **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, permite bons resultados e apresenta alto índice de satisfação dos pacientes em relação ao resultado final, visto que em 85% da amostra apontaram nível de satisfação bom (30%) e excelente (55%), neste sentido não encontrou-se alteração da qualidade de vida destes sujeitos.

Palavras - chave: qualidade de vida; manguito rotador; tratamento cirúrgico.