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Special Article

Concept of healing of recurrent shoulder dislocation☆

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ABSTRACT

This paper presents the main surgical techniques applied in the treatment of anterior recurrent shoulder dislocation, aiming the achievement of the normality of articulate movements. This was obtained by combining distinct surgical procedures, which allowed the recovery of a complete functional capacity of the shoulder, without jeopardizing the normality of movement, something that has not been recorded in the case of the tense sutures of the surgical procedures of Putti-Platt, Bankart, Latarjet, Dickson-O'Dell and others.

The careful review of the methods applied supports the conclusion that recurrent shoulder dislocation can be cured, since cure has been obtained in 97% of the treated cases. However, some degree of limitation in the shoulder movement has been observed in most of the treated cases.

Our main goal was to achieve a complete shoulder functional recovery, by treating simultaneously all of the anatomical–pathological lesions, without considering the so-called essential lesions.

The period of post-operatory immobilization only last for the healing of soft parts; this takes place in a position of neutral shoulder rotation, since the use of vascular bone graft eliminates the need for long time immobilization, due to the shoulder stabilization provided by rigid fixation of the coracoid at the glenoid edge, as in the Latarjet's technique.

Our procedure, used since 1959, comprises the association of several techniques, which has permitted shoulder healing without movement limitation. That was because of the tension reduction in the sutures of the subescapularis, capsule, and coracobraquialis muscles.

Conceito de cura da luxação recidivante do ombro

Palavras-chave:
Luxação do ombro/cirurgia
Articulação do ombro/cirurgia
Instabilidade articular

RESUMO

O presente trabalho analisa as principais técnicas cirúrgicas empregadas no tratamento da luxação recidivante do ombro (LRO), com o objetivo de obter a normalidade da amplitude dos movimentos articulares e associar diferentes tempos cirúrgicos num único procedimento para obter uma capacidade funcional completa, sem comprometer a normalidade dos movimentos, por causa das suturas tensas usadas nas cirurgias de Putti-Platt, Bankart, Latarjet, Dickson-O'Dell e outras.

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Após cuidadosa revisão desses métodos em uso, chegamos à conclusão de que a LRO pode ser considerada resolvida quanto à porcentagem de cura (97%). Permanecem, no entanto, limitações dos movimentos na grande maioria dos casos, aceitas até como necessárias para evitar recidivas.

O nosso objetivo cirúrgico visa à obtenção de uma recuperação funcional completa, atuar simultaneamente sobre as várias lesões anatomopatológicas e abandonar a ideia das chamadas "lesões essenciais".

A imobilização do ombro operado será feita somente durante a cicatrização das partes moles em rotação neutra. Com o uso de um enxerto ósseo pediculado dispensa-se qualquer tipo de imobilização prolongada, por causa da estabilidade obtida pela osteossíntese da coracoide no rebordo da glenoide, como na técnica de Latarjet.

Essa nossa conduta, empregada desde 1959, consiste, portanto, na associação das várias técnicas com as quais se obtêm a cura sem limitação dos movimentos, por causa da redução da tensão nas suturas da cápsula e dos músculos subescapular e coracobraquial empregadas nas técnicas acima.

Introduction

As indicated by the title of this study, my intention here was to demonstrate our thinking regarding the concept of curing of recurrent shoulder dislocation (RSD), in the light of current knowledge and personal experience, more than simply describing a treatment method and analyzing its results. I also aimed to provide an explanation for the general tendency to accept healing of RSD to be cessation of recurrences, even if joint function has to be partially compromised to achieve this. Our position is to define the concept of curing of RSD as healing that results not only in cessation of recurrences but also in restitution of normal functioning of the operated joint.

Evolution of surgical treatments

Surgical treatment for RSD has undergone evolution that can be divided into four somewhat elastic periods.

The first, from 1870 to 1910, was the period during which the first attempts to implement surgical solutions emerged. These attempts demonstrated that there was confusion regarding knowledge of this pathological condition, based on erroneous premises. Surgeons' attention was directed toward the capsule, and its laxity was interpreted as the sole cause of the instability. From this notion, capsulorrhaphy was developed, with its lack of success.

The second period, from 1910 to 1940, was the era of description of the techniques that would mark the path toward definitive cure of the disease, which seemed to lead to the same objective: creation of an inelastic scar on the anterior face of the shoulder. Thus, the operative techniques of Hybbinette,[1] Eden,[2] Oudard,[3] Putti-Platt,[4] Gallie,[5] Bankart,[6] Nicola,[7] Magnuson,[8] etc. emerged.

The third period was between 1940 and 1950, when it became possible to gather together the worldwide experience for judgment and analysis. This would confirm the success of the above techniques, and show the distribution of preferences according to geographical zones of influence of languages, schools or ascendance.

1950 marked the start of the period in which simplification of the surgery was sought. This goal is acceptable as a general principle of progress in any field: resolution of difficulties of a technical nature, presentation of improved results and even simplification of the surgical procedure.

Over the course of time, there was slow but sequential development of studies on RSD. Studies were conducted and their conclusions were compared until a properly grounded body of knowledge had been attained. A defined basis was thus formed, from which new attempts would start, with procedures that were identified as valid contributions toward improvements, in relation to interpretation either of the events already observed or, especially, of details with the capacity to improve the functional results from the treatment.

My participation in this subject dates back to the start of my activities within this specialty and was marked by contact with the technique of Nicola,[7] which at that time was received with great enthusiasm, since it seemed to address a common anxiety among the specialists. This anxiety seems to us to be defined as the search for simplicity, in contrast with the techniques of Bankart[6] and Putti-Platt,[4] which are also efficient but demand greater dexterity among surgeons, given the complexity of these procedures. This complexity comes not only from their requirement for the operation to be of longer duration, but also from repercussions of the risks of prolonged general anesthesia.

During the time that I was at the Rizzoli Institute, in Bologna, as a bursary-holder in 1948 and 1949, I had the satisfaction of assisting Professor Delitala[9] around ten times, to carry out his technique. As known from its details, this was also introduced as an attempt to simplify Bankart's technique,[6] comprising fixation of the capsule on the glenoid rim.

After my return from the Rizzoli Institute, my intention was to put into practice the experience with Dalitala's technique[6] that I had acquired, although I continued to feel that it was complex, albeit less so than earlier techniques. Thus, it still did not reach our ideal.

It was clear that there was a need to go into greater depth in studying this topic. Between 1952 and 1958, as we reviewed all the existing literature, we developed a new idea. Based