

# Tendon Repair after Rotator Cuff Injury in Go Training under Medical Image

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Keywords: Medical Imaging, Go Training, Rotator Cuff Injury, Posterior Tendon Repair

Abstract: Injury of the rotator cuff is a relatively common clinical disease, which often occurs in people engaged in more intensive physical labor and related athletes who have been doing strength training for a long time. The injury of the rotator cuff is often caused by the damage of the posterior tendon. The relevant data confirms that Go training can play a good role in the repair of the tendon after the rotator cuff injury. Therefore, it is indispensable to carry out relevant research on the effect of tendon repair after rotator cuff injury under Go training under medical images. The purpose of this article is to explore the effect of Go training on tendon repair after rotator cuff injury. Under the premise of understanding the basic pathology of tendon injury after rotator cuff injury, we explored the use of medical image method to generate specific images for the repair of tendon after rotator cuff injury in Go, and discussed and analyzed the generated medical images in detail. In addition, through the establishment of an experimental group and a control group, and the 20 experimental subjects of the experimental group were trained with three strengths of Go, the experimental results were analyzed in detail. The results of the study show that Go training has a better effect on tendon repair after rotator cuff injury. The medical image of the tendon after the rotator cuff injury after the Go training in the experimental group was better than the control group. The posterior tendon strength of the experimental group was stronger than the control group by about 25%, and the tensile strength of the posterior tendon after the test was stronger than the control group by about 20%.

#### 1. Introduction

With the acceleration of the pace of social life, various sports medical injuries have grown rapidly due to the following aspects, such as water sports, outdoor activities and public

transportation and forehead, shoulder, cuff and joint injury diseases are human sports physiological medicine. A common disease is a common cause of forehead, shoulder and elbow joint pain and shoulder dysfunction. If the shoulder sleeve is well repaired, good clinical results will be obtained after the operation. If the repair is not timely or the repair effect is poor, it may eventually lead to the degeneration of the shoulder joint. But failed tendon healing does not necessarily lead to frustrating results. The United States performs more than 250,000 repair operations each year. However, the repaired skin scar is easy to form because the tissue has no interface, which makes it easy to cause repair failure. The reported healing rates of patients vary greatly. The healing rate of small acute tear patients is 91%. In some large and huge acute tear healing cases, the healing rate is only 6%. In view of the relatively high failure rate of traditional surgical local repair, a new local repair strategy is needed to help improve the healing of local rotator cuff and tendon fractures.

Modern medical scanning imaging hardware technology scanning refers to the use of various modern and high-performance medical imaging scanning hardware technology equipment, and the use of special medical imaging scanning technology to scan images of certain human physiological internal structure information to obtain a certain location inside the human body. Information on the physiological and chemical structure of the human body in important parts and information on human disease processes [1]. The most commonly used technologies in clinical practice are x-ray digital imaging, computer imaging tomography digital imaging, nuclear magnetic resonance scanning imaging, ultrasound digital imaging diagnostic technology (ultrasound), and many other modern medical digital imaging diagnostic technologies [2]. The continuous improvement of medical imaging equipment technology and the development of disease diagnosis technology have provided solid scientific and technical support, and gradually become how diagnostic doctors and other medical diagnostic equipment can jointly treat and diagnose disease patients' own diseases, and how to effectively overcome the common diagnosis and treatment process. Among the unfavorable factors, as much as possible to reduce the diagnosis of the patient's disease, the degree of pain and the technical requirements of the patient's body tissue damage to varying degrees, a fast and efficient diagnosis is obtained that can truly reflect the disease patient's own disease. The specific situation of digital medical diagnostic imaging has become a hot spot in the diagnosis research of modern medical imaging technology [3].

In this paper, in order to explore the effect of tendon repair after rotator cuff injury in Go training under medical images. Among them, Tao gave a detailed introduction to the current mechanism of tendon injury after rotator cuff injury and related treatment methods, analyzed the current problems of this treatment method, and elaborated the related impact mechanism and related technology [4]. In his article, Kondo proposed the medical image technology and its superiority, and analyzed the benefits of Go training for people, especially the feasibility of the treatment of shoulder injury, and introduced the research significance and current status of this aspect [5]. Seok explained in detail the importance of treating tendon injury after rotator cuff injury, made a detailed exploration of the feasibility of various treatment methods, and discussed the feasibility of medical images and non-medical rehabilitation methods [6].

The main research content of this article is the research on the effect of tendon repair after gossip training under the medical image. Based on the research of previous scholars, this article has made some innovations. The innovations are roughly as follows: the first point is that this article first applies Go training to the repair of tendons after rotator cuff injury. Innovation and expansion. The second point is to use the method of medical images to deeply discuss the basic principles of medical images, and use the existing medical methods of medical images to show the repair of the posterior tendon in detail. The third point is to set up a control group and an experimental group by means of differential comparison. In addition, the experimental group is divided into three groups. The differences in the time and intensity of Go training are divided into three experimental groups.

The experimental conditions of these three groups are carried out. In contrast, the effect of Go training on tendon repair after rotator cuff injury was discussed.

# 2. Examination Methods and Diagnostic Criteria

# 2.1. Arthroscopy of Tendon Injury after Rotator Cuff Injury

The inspection of the posterior tendon injury in patients with rotator cuff injuries is an important prerequisite. The inspection procedure is generally performed by the same group of surgeons for general anesthesia. The patients first used bronchial surgery for intubation for general anesthesia. Mark the cartilage injury signs of the left and right shoulders and knee joints and the entrance and exit of the shoulder arthroscopy with black markers [7]. After the completion of the general shoulder anesthesia operation, first undergo a physical examination before the afternoon of anesthesia, and evaluate each patient's shoulder passive joint activity and the degree of stable shoulder joint activity [8]. The patient clinically used a single beach chair, and all patients showed no gyn humeral and wrist instability. The outer edge of the posterior acromion joint is 10mm down and 10 mm inward. This is the "soft spot" behind the anterior joint of the posterior acromion. Here, a small sharp knife is used to cut the posterior skin and the small blunt posterior side the puncture cone and the posterior sleeve catheter are inserted into the posterior articular cavity, and the posterior articular lens is placed to establish the posterior puncture approach [9]. Taking the tendons on both sides of the left biceps as the system anatomical examination signs, the system anatomical examinations were performed in a certain order. The evaluation includes the articular cartilage of the scapula and humeral head, the labrum, the biceps tendon, and the articular side of the rotator cuff [10].

After the glenohumeral joint examination is completed, the endoscope is withdrawn, the blunt puncture cone is penetrated into the subacromial space, and the acromial shape, the acromial bursa and the rotator cuff tendons are explored and cleaned [11]. If the inspection reveals that it has a characteristic osseous lesion or I or II or III located in the acromion, which is caused by the impact of the glial membrane of the acromion, it is located under the acromion. Sharpening the electric sharpener and large-scale radio frequency automatic vaporizing electric sharpener can remove the bone tissue and cortical wounds such as inflammatory joint synovium and bursa with hyperplasia of the subacromial space. Bone and cortical tissues are strongly ground to eliminate the factors that cause the bone synovial impact sign.

# 2.2. Diagnostic Criteria of Tendon Injury after Rotator Cuff Injury

For the diagnosis criteria of tendon injury after rotator cuff injury, the most important thing is to judge the acromion formation, and this step must be carried out early, because the long-term infusion of high-pressure normal saline in the experiment will cause the soft tissue under the acromion to be filled and edema. The illusion of narrowing the subacromial space has a certain effect on the surgical field of vision, which can cause excessive grinding of the acromion and fracture. If damage to the rotator cuff is found, the lateral approach is established after evaluating the damage under the microscope, and an 8.0mm working sheath is inserted. First, the rotator cuff muscle space is cleared and loosened under the microscope. The lower surface of the acromion, the deltoid muscle and the bursa around the shoulder sleeve has different degrees of adhesion. Use a planer knife and a vaporized ion knife to remove the adhesion tissue [12].

Afterwards, try to clamp the broken end of the shoulder sleeve with tissue clamping forceps under the microscope, observe the degree of movement of the different parts of the front and back of the broken end, and check whether it can be pulled back to the vicinity of the dead point. If the

resistance is large, it is difficult to pull the broken end of the tendon. When approaching the dead point, the tendon gap between the anterior superior scapular muscle and the anterior subscapularis muscle at the base of the anterior coracoid process and the posterior superior supraspinatus and subangular muscle at the anterior shoulder blade ganglion. The action is combined with complete loosening. When the loosening is complete, then use a fresh bony bone planer to polish the nodule with the great homers muscle and combine it to form a piece of smooth bone surface exuded congested fresh bone wound. However, it is not allowed to blindly grind the bone wounds excessively during the operation, especially for patients with osteoporosis. Excessive intensive abrasion and cutting directly destroys the basic formation conditions of important bones that fix the bones and tendons, and it is easy to directly cause unstable fixation and loosening. A variety of complications, such as difficult suture cutting, led to complete failure of the fixation operation [13].

# 3. Go Training Function and Medical Image Method

# 3.1. Common Functions of Go Training

Go game is a kind of ancient Chinese Go culture, full of vitality, and it has traditional chess entertainment sport with cultural connotation of the warring states period [14]. Not only is it a large-scale intellectual interactive game and a large-scale sports competition, but it is also a traditional culture, an important part of ancient Chinese culture, and the essence of China. However, in today's sports competitions, the criteria for winning or losing are not uniform, and different scoring rules are used for different events [15]. Therefore, the rules of Go scoring should be unified as soon as possible in order to better play and more comprehensively grasp the laws of Go activities. As an attractive activity, the role of Go is the focus of attention [16].

# (1) The promotion effect of Go activity on intelligence

Go learning of students of different ages, it was found that students learning Go have significantly improved their memory, image thinking and logical thinking ability, which promoted the development of intelligence. A scholar also suggested in the study of Go that the important role of Go is puzzle, thereby promoting the overall development of students. Through the analysis of college students 'learning of Go, it is found that college students' traditional way of learning Go knowledge helps their dialectical thinking and the gradual formation of the overall view of Go [17]. The research and analysis of Chinese Go shows that Go not only helps students to gradually develop their memory, observation and creative thinking ability, but also it is an important training to improve memory thinking ability. In addition, comparing the left and right brain nerve functions and MRI imaging when playing Go and personal chess and chess, it can be found that the left or right brain is used more often when playing chess and chess, and the right brain activity is used more often when playing Go [18]. The results of this study provide a physiological basis for the theory of Go as a scientific hypothesis that promotes the progress of human intelligence [19].

#### (2) Promoting effect of Go activity on mental health

From the perspective of school education, the influence of Go on mental health is discussed, and it is pointed out that Go plays a very positive influence on people's mental health, and it can even adjust people's emotions [20,21]. In addition, some scholars have studied Go and quality education. Speaking of the positive effect of participating in Go competitions on the mental health of students; because we think that Go activities are a very large sports training project that requires students to use their brains. Domestic experts in the field of psychiatric medicine agree that playing Go is not only liberate modern people from the daily and complicated medical work and spare time learning, and the mental effect is very obvious. At the same time, playing Go is very beneficial for people to relieve tension and bad emotions and at the same time to maintain people's mental health [22].

Therefore, go training can promote and improve people's physical and mental health to a certain

extent, and its application to repair of tendons after rotator cuff injury is worth discussing.

# 3.2. Acquisition and Characteristics of Medical Images

A variety of new diagnostic techniques have emerged in modern medical imaging diagnosis. On the one hand, it has greatly promoted the innovative development of modern medical imaging diagnostics. On the other hand, it has also provided very good modern medical imaging research for China's modern scientific medical imaging diagnosis. Due to the continuous addition of new generation technology, the images in modern medicine have gradually produced some new technical features [23].

# (1) Data difference

Due to the diversity of various medical image data collection techniques and usage methods, this makes the various types of medical image collection data have large differences in quality storage, resolution and other factors, which is also the source of diverse medical data an important manifestation of sex [24].

# (2) Data ambiguity

Comparing various types of medical images that are often used clinically with ordinary medical images used in daily life, the images also have strong ambiguity and uneven distribution of images. This is mainly due to the different radiation responses of various organs of different organs and tissues of the human body or different areas of the human lesion to various signals [25].

#### (3) Multimodality

Multi-modality is due to the difference in technology and equipment used in image shooting, and multiple modal images can better reflect the patient's condition [26].

DICOM is digital image imaging and information communication in digital medicine. It is an international standard (iso12052) for processing medical digital images and other related medical information. The main purpose of the official appearance of this technical standard is to provide a completely unified and completely independent data interface between different types of medical physiological imaging technology equipment and different types of medical physiological imaging technology products, so that Type medical imaging devices directly transmit medical data streams and exchange information more efficiently [27]. Medical images are usually borrowed from DICOM technology protocol to obtain related graphics.

#### 4. Clinical Experimental Research

# 4.1. Materials Needed for the Experiment

The necessary main medical reagent solutions and drug configuration materials used in the experiment are as follows:

- (1) Drug preparation of osteoblast induction hormone medium: 10% FBS A-mem induction medium; 10mm B-sodium glycerophosphate; 50um vitamin c and 1um dexamethasone.
- (2) Drug preparation of audiogenic activity-inducing molecular medium: 10% FBS A-mem induction medium; 1um dexamethasone; 200um indomethacin; 0.5mm IBMX; 10um insulin.
- (3) RNASE-FREE ultrapure water: first use an RNASE-FREE white glass bottle; quickly add to the terminal ultrapure water to the terminal water concentration of 0.01% (V / V); after repeated stirring overnight; the high temperature and high-pressure heat is extinguished bacteria.
- (4) Preparation of sterilization of competent aqueous solution: 0.1mCaCl2 solution; sterilization by 0.45 filtration; 250mm KCl in water; 2mm NaCl solution; sterilized by autoclaving. SOB: 1ml KCl; add the solution to 100ml LB again; adjust the pH to 7.0 with 5m NaOH high pressure; sterilize by autoclaving; and add 0.5ml 2m MgCL2 solution before use.

- (5) Acrylamide sterilization stock solution: add 30g of acrylamide; 0.8g of methylene amine and diacylamine; mix with 100ml of DDH2O water and dissolved brine; filter and sterilize.
- (6) 0.25% pancreatin phosphate digestion solution: 0.25 g of pancreatin is dissolved in 100ml D-HANK'S. After fully dissolved, it is sterilized by a filter with a pore size of 0.22 $\mu$ m, and packed into sterile bottles medium; low temperature storage at 4  $^{\circ}$ C.
- (7) 8-fold high-speed separation type rubber buffer raw material stock solution: TRIS-HCl (pH = 8.8) 3.0m, that is, Tris 36342mg, pH = 8.8, constant volume to 100ml. In addition, the equipment to be tested, the name of the equipment and the manufacturer's information are shown in Table 1.

Name of equipment	Manufacturers
Table concentrator	Shanghai experimental equipment colt
Digital gel processing system	Bio-Rad
PCR	Eppendorf
Cell incubator	Thermo scientific

Table 1. Experiment equipment, equipment name and manufacturer information

# 4.2. Subject and Related Materials

The experimental subjects were 40 patients admitted to a second-class hospital in Jiangsu Province at the same time, of which 20 patients served as the experimental group and 20 patients served as the control group. The inclusion criteria of the experimental subjects include: patients diagnosed with arthroscopic diagnosis of rotator cuff injury; medical history of more than 1 month, no history of obvious trauma. Treatment with total arthroscopy, suture treatment by double-row single-needle suture; keeping follow-up data complete, the follow-up time should not exceed 1 year of follow-up patients; follow-up patients must obtain informed consent, sign the follow-up patient's consent to deal with matters, and approved by the people's hospital medical ethics committee. The criteria for the exclusion of the risk of experimental subjects include: the former suffers from chronic periarthritis with acute fracture, dislocation, blood vessel, nerve injury, and surgical history. There is an infection in the affected shoulder joint; there is severe osteoarthritis in the affected shoulder joint. Cases of failure to complete rehabilitation procedures as planned after surgery.

From January 2017 to January 2018, a total of 40 patients were included in the orthopedic hospital of our hospital who received repair and exclusion surgery on the right rotator cuff injury under the whole-body according to the serial number of the above-mentioned cases included in the surgical standard and repair and removal surgical standard. Patients in our department entered the surgical research group. Collect and record the basic information such as the patient's age, gender, time of onset, etc. All orthopedics patients are pre-examined before surgery to complete and accept the x-ray of the back position of the human scapula joint exit back position, the supraspinatus muscle and the humeral joint exit position. Position X-ray and large-scale human scapula joint exit position MRI ultrasound imaging examination. The VAS score was used to evaluate and record the pain scores of the shoulder joints of the patients before and after the operation. The scores of the overall pain function of the shoulder joints of the patients before and after the operation.

For the experimental group, we use the method of Go training to explore the repair effect. The method and intensity of Go training are as follows: (1). Daily human-machine Go game for 2 hours; (2). Daily human-machine Go game for 3 hours. (3). 25 hours of man-machine battle with everyone in one week, and another 2 hours of Go simulated shoulder movement. For these three different intensities, the experimental group personnel were divided into lots, and the number of grouped personnel was compared to 6: 6:8. The control group is treated by conventional medical care. The

experimental group experiment time is the same as the control group experiment time. The total time is: March 1, 2018-July 1, 2018, the total duration is half a year.

# 5. Histological Changes of Tendon Repair after Rotator Cuff Injury

# **5.1.** Analysis of Tendon Repair after Goose Training Rotator Cuff Injury under Medical Images

The rotator cuff muscle is an important muscle structure of the entire human body in the process of shoulder muscle movement. It is mainly composed of the supraspinatus muscle, the infraspinatus muscle, the great circular muscle of the forearm, and the shoulder tendon of the subscapular muscle. The anterior edge of the anatomical neck of the great homer's tuberoses and radial muscle of the homers. The shoulder sleeve unit is a complete chest multifunctional chest anatomical control unit, which is mainly used to control the normal rotation of the patient's shoulders and joints and maintain the stability of the patient's shoulders and joints. Rupture of rotator cuff osteotomy usually rarely occurs at 1 cm mm proximal to the small nodule of the thigh, which is mainly due to the nourishment tissue vessels at the end of the supraspinatus tendon near the nodule and the skeletal fascia of the proximal end of the small thigh. The junction of the blood vessel wall of the frontal nourishing tissue is a weak part of the tissue blood supply. After the rupture, the direct osteotomy suture of this part is not conducive to wound healing because it provides poor tissue blood supply. The specific injuries of tendons after rotator cuff injuries are shown in Table 2:

 The damaged location
 Damage size
 Degree of injury

 Proximal to the greater tubercle
 1\*1.2
 7

 LCR
 0.5\*0.1
 6.5

 CURI
 0.2\*0.4
 5.7

 LING
 0.6\*0.75
 6.3

Table 2. Tendon injury after rotator cuff injury

In this paper, the medical imaging method of HE staining photo pathology group under the microscope. The block diagram of the observation results of this group is as follows: normal non-damaged tendon control group: he local staining diagram but elastic tendon muscle fiber, cartilage and bone and other tissues. The structural hierarchy is clear, and the typical tissue-like structure of elastic bone tendon fiber junctions (elastic tendon fiber tissue, inelastic calcified tendon fiber tissue cartilage, calcified tendon fiber tissue cartilage and bone) is arranged, and the cells are arranged neatly. On the 7th and 14th postoperative days, the shoulder and upper supraspinatus joint musculoskeletal-tendon joint injury surgery healing examination section: he rays staining diagram but shows that clostridium forms fibroblasts inside the tubular interstitial cartilage and is full of visual field. Seeing the formation of fibroblasts inside the tubular cartilage suggests that the peak of scar hyperplasia is mainly fibroblasts. After 21 days of training of Go players, healed shoulder arm sleeve supraspinatus musculoskeletal-tendon supraspinatus injury healing repaired in the healing stained section: healed staining showed that a large number of supraspinatus musculoskeletal fibers were found. The cartilage fiber cells in the tendon are internally proliferated, and the results of HE staining light microscope observation of tendon repair after rotator cuff injury before and after the experiment are shown in Figure 1.

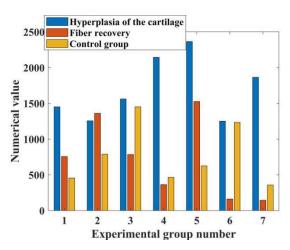


Figure 1. The results of tendon repair after anterior and posterior rotator cuff injury were observed under, HE staining optical microscope

From the data in Figure 1, it can be seen that this repair effect of tendon after using Go training rotator cuff injury can be observed under the HE staining optical microscope, the cartilage in the damaged location has hyperplasia, and the hyperplasia has increased by about 0.1cm. The fiber structure has also been significantly improved, with damaged fibers recovered by about 56%.

The tendon and bone healing are extremely slow, and it usually takes about 6 weeks or even longer to form a more stable bone tunnel scar for connection. Compared with the healing of normal tendon and fibrocartilage tendon BTJ, the strength of the bone tunnel. There is still a big gap between the load and the limit; and the connection of this kind of scar often takes up to 6 months or even 1 year, so it can be transformed by bone tunnel local shaping to form tendons and fibrocartilage tendon. During this period, any overly aggressive treatment and rehabilitation may directly lead to the split of the tendon junction and lead to failure of healing. Tendon repair after rotator cuff injury using Go training is shown in Figure 2.

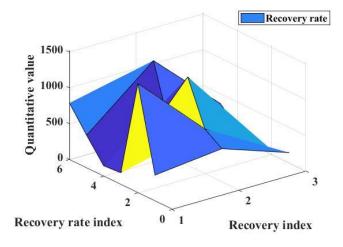


Figure 2. Tendon repair after rotator cuff injury in Go training

As can be seen from the data in Figure 2, tendon repair is feasible after rotator cuff injury using Go training, and the recovery rate and recovery speed of patients under this rehabilitation method are more. Compared with the general method, patients, the recovery rate increased by 12%, and the recovery rate increased by 3 percentage points.

# 5.2. Analysis of the Effect of Go Training on Tendon Healing after Rotator Cuff Injury

Generally speaking, strong initial strength, strong mechanical stability and bio-healing of tendon-bone interface are the main factors that affect the effect of rotator cuff injury repair surgery. The gradual understanding of the biology and biomechanics of the rotator cuff and the improvement of surgical techniques have effectively improved the scar tissue at the tendon-bone interface and promoted the development of the healing process of the tendon-bone interface. Recently, some biological interventions have been introduced to improve the tissue healing ability and clinical functional effect after rotator cuff repair. These measures include stem cells, tissue engineering, the increase of cells or extracellular matrix, the application of growth factors (GFS) of the musculoskeletal system, and these methods can only improve the damaged site, but for the recovery of the strength of the posterior tendon. The effect is very small, and the Go training method used in this paper has an effect on the strength of tendon repair after rotator cuff injury, as shown in Figure 3.

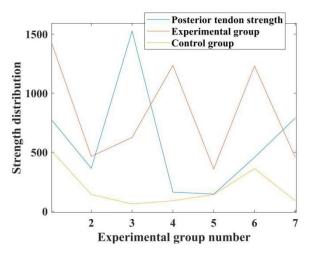


Figure 3. The influence of Go training on the strength of tendon repair after rotator cuff injury

From the data in Figure 3, it can be seen that the strength of the tendon after the repair of the rotator cuff injury in the experimental group and the control group is very different. Compared with the control group, the experimental group with Go training has significantly better tendon strength after recovery. Tendon strength increased by 25%.

From the perspective of human physics, the bone-tendon interface is still a weak point of human mechanics. According to the structure of the interface, the tissue can be subdivided into tendon fibers, fibrocartilage, calcified tendon fibers, cartilage and bone, etc. 4 Layer, when energy is transferred between relatively soft, freely stretchable tendon tissue and relatively hard, non-freely stretchable tendon tissue through the action of mechanics, due to the huge difference in the mechanical and physical characteristics of the two, this interaction. During the action of the interface, stress concentration will gradually form and the tissue will break. Under physiological conditions, the special structure at the tendon stop point can make the tissue in this area have better tensile strength. Because there is no clear boundary between the layers, and the mechanical properties of the 4 layers of tissues show a gradual transition trend, making the stress. It can be gradually transferred from the tendon to the bone or from the bone to the tendon, avoiding the stress concentration of the tendon at a certain point. In the sense of this process, the biological elasticity of the tendon can be adjusted to repair, which is of great significance to restore the normal composite tendon structure at the interface between bone and tendon. The effect of Go training on the tensile strength of tendons after rotator cuff injury is shown in Figure 4.

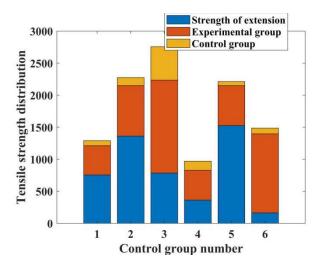


Figure 4. The influence of Go training on the tensile strength of tendon after rotator cuff injury

It can be seen from Figure 4 that Go training has a great influence on the tensile strength of tendons after rotator cuff injury, which also confirms that Go training is feasible to repair tendons after rotator cuff injury. The tensile strength of is significantly better than that of the control group, and the strength of the tendon is obviously increased by about 20% compared with the control group.

#### 6. Conclusion

- (1) This article analyzes the current common problems in the repair of the posterior tendon of patients with rotator cuff injury, and discusses to solve these problems and proposes corresponding solutions. It introduces the development and influence of related treatments and research methods, and conducts research on related influences and mechanism of influence.
- (2) Analyze the tendon repairability after Go training on rotator cuff injury under the medical images studied in this paper, and elaborate on the effect of using Go training on rotator cuff injury after tendon repair hyperplasia occurred in the cartilage at the location. The hyperplasia was about 0.1cm, and the fibrous tissue at that location was also significantly improved, and the damaged fiber recovered about 56%. In addition, the recovery rate and recovery speed of patients under this rehabilitation method are even more. Compared with the general method, the recovery rate of patients under this method has increased by 12%, and the recovery speed has increased by 3 percentage points.
- (3) Explore the role of Go training in tendon healing after rotator cuff injury. It has been verified by experiments that Go training has better effect on tendon repair after rotator cuff injury. The medical image of the tendon after rotator cuff injury after the Go training is better than that of the control group. The strength of the posterior tendon is about 25% stronger than that of the control group, and the tensile strength of the posterior tendon after the test is stronger than the control group by about 20%.

#### **Funding**

This article is not supported by any foundation.

# **Data Availability**

Data sharing is not applicable to this article as no new data were created or analysed in this

study.

#### **Conflict of Interest**

The author states that this article has no conflict of interest.

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