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Traditional Chinese Medicine Pathologies for the Treatment of Shoulder Pain

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Abstract

The development of shoulder surgery followed this algorithm in all medical specialties. A recent systematic review outlined the use of Tuina as a traditional medicine method in the treatment of the frozen shoulder. Tuina is the use of a certain part of the hand or limb by a physician on a patient to press, push, grasp, roll, and pinch, producing a biological effect and eventually improving clinical symptoms. Acupuncture, too, is widely used in China and also in many other countries to treat different conjunctive tissue disorders, including shoulder contractures, stiffness, and pain.

Keywords: Rotator cuff pathologies; Shoulder and elbow surgery; Clinical work; Shoulder surgeon; Modern treatment; Technical improvements

Introduction

Modern shoulder surgery was developed in the Western world by Bankart and Codman. The vision of shoulder pathologies was further enlightened by Charles Neer, who was the founder of the modern specialty of shoulder surgery based on anatomical knowledge, outcome studies of the surgery for rotator cuff pathologies, arthroplasty, instabilities, and various traumatic and degenerative conditions that were treated traditionally in general surgery services or with conservative methods [1]. Neer's teachings were followed and upgraded by his illustrious fellows from North America and Europe, including Frederick. The European School of Shoulder and Elbow Surgery brought important contributions to the development of the specialty, including the works of Latarjet and the Lyon School proudly represented by Gilles Walch and his followers, the Dijon School of Grammont, inventor of the modern reverse shoulder arthroplasty, the Swiss School of N. Schwengt and Christian Gerber, and many other national schools and institutes that developed shoulder and elbow knowledge in Europe and worldwide [2]. Many shoulder and elbow schools have Chinese fellows and colleagues who are actively contributing to the scientific development of shoulder and elbow surgery in China. Scientific publications in the field of shoulder and elbow surgery include many valuable Chinese contributors and respected authors, and this special issue is an example of the volume and quality of research and clinical work performed in China.

Methodology

The predecessors of Chinese orthopaedic surgeons, including professors Feng Chuanhan, Guo Shiba, and Huang Gongyi, published Shoulder Surgery, a text which outlined the development of this specialty in China. The academic environment for shoulder and elbow surgery is very good and the International Congress of Shoulder and Elbow Surgery is held every year [3]. Teaching and training meetings and workshops are organized by regional central hospitals. In May 2014, the Chinese Shoulder and Elbow Society was established with Jiang Baoguo from the Peking University People's Hospital elected as first chairman. The current chairman of the CSES is Chunyan Jiang, a well-known scientist and respected shoulder surgeon [4]. The current special issue of Orthopaedic Surgery includes scientific papers from different shoulder, elbow, and orthopaedic departments that specialize in articular surgery and quality modern treatment. It is with pleasure and pride that the French group of surgeons led by Philippe Hernigou from Paris presents the paper concerning the osteonecrosis of the humeral head, based on a very important clinical experience. Recent advances in the arthroscopic management of shoulder pathologies are presented by teams from Shanghai6 and Guagzhou [5]. Traumatology is well-represented and specific specialized solutions are described by highly qualified colleagues from different centres in Quingdao, Shanghai, Tianjin, and Chengdu. Technical improvements and solutions in humeral nailing are described by Xiao-ming Wu from Shanghai. Traumatology is an important part of the shoulder and upper limb specialty, and the trauma services are constantly developing techniques and procedures dedicated to better patient care, minimally invasive procedures, and lower radiation exposure during the procedure, which is better for the surgical team and also for the patient [6]. Shoulder anterior instability and treatment based on anatomic repair and reconstruction are an important part of our specialty as shown in (Figure 1). All major shoulder services are performing different arthroscopic and open techniques of reconstruction based on accurate evaluation of the sources of instability and good quality ligamentar, capsular, and bone repair. Reverse shoulder arthroplasty became very popular in the last 20 years, and currently China is developing this chapter for better patient care, offering new solutions in shoulder reconstruction for orthopaedic and traumatic conditions [7]. A recent work was published in Chinese by Bo Lu from Shizhajuang, and two papers included in this special issue concern traumatic and rheumatoid destructive conditions treated by reconstruction with reverse shoulder arthroplasty. The sub-acromial space and management of cuff conditions are explored in two papers by Chengdu and Xiamen. The elbow specialty is developed either in upper limb services or in combination with shoulder services [8]. Chinese elbow specialists are extremely proficient and publish excellent results on both traumatic and orthopaedic elbow conditions.

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Figure 1: Anterior instability and treatment based on anatomic repair.

Discussion

In this special issue, the elbow traumatology includes papers from Beijing, Chengdu, and Tianjin. The excellent elbow arthroscopy papers are authored by Jiuzhou Lu and colleagues from Shanghai. They describe experience with the techniques of release for post-traumatic elbow contracture and stiffness and with heterotopic ossifications occurring in the elbow after arthroscopic release [9]. The publication of a special issue of Orthopaedic Surgery dedicated to the shoulder and elbow specialty is an event that requires readers' attention. Neglected in the past and reduced to some basic procedures for many years when lower limb surgery or trauma were the focus of publications, shoulder and elbow surgery has now become a modern part of orthopaedics, performed currently with high-quality technical tools, outstanding optical devices, arthroscopes, image intensifiers, fluoroscopes, high-frequency ultrasound machines, radiology or computer tomography scan devices used preoperatively [10]. The final beneficiary is the patient that will eventually experience shorter hospital stay, minimally invasive surgery, insignificant or reduced bleeding, solid repairs, early mobilization and shorter medical leave, earlier return to work or usual activities, and overall better quality of life. China is a great country, and history teaches us that it was the largest producer and provider of goods and tools, as well as being a nation that developed many concepts and ideas in different fields of activity, including medical science. Medical communication and journals are used to share knowledge, and it took us centuries to learn that the key to success is the quality of the teaching and the results [11]. Outcome studies and peer-review processes changed our way of pursuing medical careers and libraries, and databases are now the depositaries of great knowledge. The effect of nicotine on bone healing is well known. However, little is known about the effect of nicotine on tendon-to-bone healing [12]. Galatz performed an eloquent experiment in which acute supraspinatus tendon repairs were performed in rats. During the healing phase, some rats were exposed to nicotine and others were exposed to saline solution as a control. There was a delay in tendon-to-bone healing in rats that had been exposed to nicotine. While the mechanical properties increased over time in both groups, the properties in the nicotine group lagged behind those in the control group. This study demonstrated the detrimental effect that nicotine may have on rotator cuff healing following rotator cuff repair. Extracellular matrix scaffolds have been used during rotator cuff surgery to augment deficient tissue and to close small residual cuff tears [13]. Interestingly, very few independent data exist regarding the properties of commercially available extracellular matrix grafts. Derwin investigated the biomechanical, biochemical, and cellular properties of

Figure 2: Evidence of the healing potential repair.

four graft materials. Biomechanically, all four graft materials required substantial stretch before they could carry substantial load. DNA content, indicating residual native cellular elements, was measurable in three of the four grafts but was significantly higher in one [14]. The poor biomechanical properties of these grafts suggest that the use of these grafts does not protect the rotator cuff repair through load sharing. Additionally, measurable DNA content indicates that some cellular elements remain in the graft. Rotator cuff healing following surgical repair continues to be unpredictable. Blood flow to the tendon edge has been viewed as evidence of the healing potential of the repair as shown in (Figure 2). Minimal debridement of the tendon has been recommended on the basis of studies that have demonstrated adequate blood flow to the torn tendon edge. However, Matthews believed that cellular activity in the torn rotator cuff is a more important measure of the healing potential [15]. Cellular oxygen consumption was measured in thirteen patients undergoing mini-open repair of small, medium, large, and massive full-thickness tears. Control measurements were taken from three patients with grossly normal tendons. All of the torn tendons had lower cellular activity than did those in the control group. Cellular activity was lower at the edge of the tear, with the lowest activity occurring in larger tears. The natural history of rotator cuff disease is poorly understood. Specifically, the demographic and morphological characteristics of asymptomatic and symptomatic rotator cuff tears are not clearly established in the literature. Yamaguchi evaluated bilateral shoulder ultrasound studies for patients presenting with unilateral shoulder pain in an attempt to compare tear characteristics and the prevalence of asymptomatic and symptomatic rotator cuff disease. Patient age correlated with both the presence and absence of a rotator cuff tear and the extent of the tear. The operative treatment of articular-sided partial-thickness rotator cuff tears remains controversial. Deutsch reported on forty-one patients with articular-sided partial-thickness tears that were treated with completion of the tear and arthroscopic repair of the full-thickness defect with use of a simple suture technique. After short-term follow-up of three years, significant improvements were noted in terms of the American Shoulder and Elbow Surgeons score, pain relief, and patient satisfaction. Forty of the forty-one patients were satisfied with the outcome. There has been a rapid evolution in the arthroscopic techniques for rotator cuff repair. When evaluating the literature, the success or failure of arthroscopic techniques must be judged against the results of established open techniques. In a study by Liem, the clinical outcomes and structural integrity of arthroscopic and mini-open rotator cuff repairs were compared. Patients were matched according to age, gender, and the duration of symptoms. Preoperative and postoperative Constant scores and early postoperative range of motion were evaluated. Structural integrity of the rotator cuff was determined with magnetic resonance imaging at the time of the latest follow-up. The clinical outcome demonstrated no differences between the two treatment groups. There was no difference in re tear rates as

demonstrated on postoperative magnetic resonance imaging between the arthroscopic repair group and the mini-open group.

Conclusion

Smaller re-tears had no influence on the clinical result, whereas more retracted re-tears correlated with lower abduction strength, regardless of the repair method. One can conclude that the arthroscopic repair of isolated supraspinatus tears produces excellent clinical results and equivalent tendon integrity as compared with mini-open repair.

Acknowledgement

None

Conflict of Interest

None

References

1. Weiser M (2004) The Homeopathic Preparation Traumeel S Compared With NSAIDs For Symptomatic Treatment Of Epicondylitis. J Musculoskelet Res EU 8:119-128.
2. Moattar F (2009) Comparison of effects of ginger, mefenamic acid, and ibuprofen on pain in women with primary dysmenorrhea. J Altern Complement Med US 15:129-132.
3. Dahl V (2009) Clinical application of glucocorticoids, antineuropathics, and other analgesic adjuvants for acute pain management. CUP UK: 398-731.
4. Prystupa A, Drozd M (2013) Assessment of pain: types, mechanism and treatment. Ann Agric Environ Med EU 1:2-7.
5. Kruse RJ (2004) The physiologic basis and clinical applications of cryotherapy and thermotherapy for the pain practitioner. Pain Physician US 7:395-399.
6. Trout KK (2004) The neuromatrix theory of pain: implications for selected non-pharmacologic methods of pain relief for labor. J Midwifery Wom Heal US 49:482-488.
7. Mao J (2014) Neuropathic pain: mechanisms and their clinical implications. BMJ UK 348:1-6.
8. Mello RD (2008) Spinal cord mechanisms of pain. BJA US 101:8-16.
9. Weidner MS, Andersen LA (2000) A randomized, placebo-controlled, cross-over study of ginger extracts and ibuprofen in osteoarthritis. Osteoarthr Cartil EU 8:9-12.
10. Ross NA (2006) Natural anti-inflammatory agents for pain relief in athletes. Neurosurg Focus US 21:1-13.
11. Kahn LH (2006) Confronting zoonoses, linking human and veterinary medicine. Emerg Infect Dis US 12:556-561.
12. Smith HV (2000) Emerging parasite zoonosis associated with water and food. Int J Parasitol EU 30:1379-1393.
13. Macpherson CNL (2014) Zoonoses and one health: a review of the literature. J Parasitol 2014:1-8.
14. Cooper GS (2004) Occupational and environmental exposures as risk factors for systemic lupus erythematosus. Curr Rheumatol Rep EU 6:367-374.
15. Costenbader KH (2016) Environmental exposures and the development of systemic lupus erythematosus. Curr Opin Rheumatol US 28:497-505.