Please find below the results of your literature search request.

If you would like the full text of any of the abstracts included, or would like a further search completed on this topic, please let us know.

We’d appreciate feedback on your satisfaction with this literature search. Please visit [http://www.hello.nhs.uk/literature_search_feedback.asp](http://www.hello.nhs.uk/literature_search_feedback.asp) and complete the form.

Thank you

**Literature search results**

<table>
<thead>
<tr>
<th>Search completed for:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Search request date:</td>
<td>6th November 2009</td>
</tr>
<tr>
<td>Search completion date:</td>
<td>13th November 2009</td>
</tr>
<tr>
<td>Search completed by:</td>
<td>Richard Bridgen</td>
</tr>
</tbody>
</table>

**Search details**

Hand therapy after trapeziectomy with physiotherapy and/or occupational therapy

**Resources searched**

NHS Evidence; National Library for Health; Cochrane Library, TRIP database; CINAHL, AMED; MEDLINE; EMBASE; Google Scholar; Google advanced search

Database search terms: trapezoid; trapezium; carpal; CARPAL BONES; bone; PHYSICAL THERAPY, physical therap*; physiotherapy*; occupational therap*; OCCUPATIONAL THERAPY; surg*; trapez*; hand therapy; HAND THERAPY

Google search string: ("hand therapy" OR physiotherapy* OR "physical therap*" OR "occupational therap*") trapez* carpal -shoulder -scapular

**Summary**

There is quite a lot of research around trapeziectomy, and while I have included some research that may be of interest and of partial relevance, I could find nothing specific to your question.

**Guidelines**

None found

**Evidence based reviews**
Published research


Author(s): Giannikas D, Karabasi A, Fotinopoulos E, Tyllianakis M

Citation: Journal of Trauma, 01 December 2008, vol./is. 65/6(1468-1470), 00225282

Publication Date: 01 December 2008

Abstract: Open transtrapezial injuries of the thumb are not common and sufficiently described injuries. We have clinically and radiologically evaluated six patients with transtrapezial injury of the thumb. The average follow-up time was 65 months. All injuries occurred in young people, who had high-energy trauma to their thumb. Fracture of the trapezium with exposure of the first carpometacarpal joint was a constant along with soft tissue damage. The latter included thumb tendons, digital nerves and arteries, motor branch of the median nerve, palmar or dorsal branch of the radial artery, and thenar musculature. All trapezium fractures were fixed with mini 1.5 mm screws. All the other injured structures were repaired by microsurgical techniques. Physiotherapy protocols with emphasis to electrostimulation were used within 2 weeks postoperatively. Clinical assessment included objective and subjective criteria, which revealed moderate loss of motion because of musculature loss either by direct trauma or by denervation. No correlation was found between types of trapezium fracture and disability. Internal osteosynthesis with 1.5 mini cortical screws provided excellent stability. Despite the severity of the initial trauma the results were surprisingly good.

Source: CINAHL

Full Text:
Available in fulltext at Ovid


Author(s): Batra S, Kanvinde R

Citation: Current Orthopaedics, 01 April 2007, vol./is. 21/2(135-144), 02680890

Publication Date: 01 April 2007

Abstract: Trapeziometacarpal osteoarthritis is a very common condition, with radiological changes prevalent in 30% of post-menopausal women but a large number being asymptomatic. A lack of bony constraints and laxity of the supporting ligaments, particularly the "beak" ligament is consistently implicated in disease progression. The severity can be staged according to the radiological appearance, which does provides a conceptual framework for rationale of treatment. Fortunately, roles for both conservative and surgical options currently exist to successfully treat joint pain and restore joint stability. The surgical options range from ligament reconstruction or osteotomy for early painful laxity, through to trapeziectomy, arthrodesis and arthroplasty for more severe osteoarthritis. The success of ligament reconstruction tendon interposition arthroplasty in treating trapeziometacarpal arthritis has withstood the test of time. Trapeziometacarpal joint replacement ranges from elastomeric spacers and true total joint replacement to the more current hemiarthroplasty designs with varying results. A better understanding of surgical outcomes for advanced arthritis requires long-term prospective outcome studies while the pursuit for an ideal trapeziometacarpal arthroplasty continues.
2. Trapeziometacarpal arthroscopy: a classification and treatment algorithm.

Author(s): Badia A

Citation: Hand Clinics, 01 May 2006, vol./is. 22/2(153-163), 07490712

Publication Date: 01 May 2006

Abstract: Arthroscopic assessment of the CMC joint allows direct visualization of all components of the joint, including synovium, articular surfaces, ligaments, and the joint capsule. It also allows for the extent of joint pathology to be evaluated and staged with intraoperative management decisions made based on this information. The author recommends this arthroscopic staging to ensure better judgment of this condition in order to provide the most adequate treatment option to patients who have this disabling condition. Future studies assessing the clinical long term results using arthroscopy will likely ensure its place in the treatment armamentarium for trapeziometacarpal osteoarthritis. Copyright © 2006 by Elsevier Inc.

Source: CINAHL

3. Trapeziectomy.

Author(s): Mahoney JD, Meals RA

Citation: Hand Clinics, 01 May 2006, vol./is. 22/2(165-169), 07490712

Publication Date: 01 May 2006

Abstract: Primary osteoarthritis of the carpometacarpal joint of the thumb is common, especially in women aged 60 or older. Patients usually present with activity-related pain at the thumb base. First treatment may include activity modification, pain relieving medications, splinting, and possibly corticosteroid injections. When these measures fail to preserve or restore the patient's quality of life, surgical intervention may be appropriate. Many surgical alternatives are described for the treatment of thumb carpometacarpal joint arthritis, and most begin with at least partial trapeziectomy. Hematoma-distraction arthroplasty results in improved outcomes as compared with historical results following trapeziectomy alone. Temporary distraction allows the body's healing response to fill in the trapezial void with scar tissue, obviating the need for ligament reconstruction or tissue interposition. Copyright © 2006 by Elsevier Inc.

Source: CINAHL

1. Presentation and management of arthritis affecting the trapezio-metacarpal joint

Author(s): Pai S., Talwalkar S., Hayton M.
Citation: Acta Orthopaedica Belgica, January 2006, vol./is. 72/1(3-10), 0001-6462

Publication Date: January 2006

Abstract: Arthritis affecting the trapezio-metacarpal joint (TMJ) of the thumb is a very common condition, and in the upper limb represents the site most often requiring surgery for symptomatic osteoarthritis. The condition predominantly affects women, especially those who are post menopausal. Management of the condition initially entails the use of conservative measures. Many of these are administered in the community by general practitioners as well as occupational therapists, surgery being reserved for disabling symptoms and loss of function resistant to these measures. From a review of the currently available literature, we present an overview of this common condition, commenting on its clinical presentation, pathophysiology and the treatment options available. A treatment algorithm is presented, to aid practitioners in the management and referral of patients with symptomatic thumb TMJ arthritis. copyright 2006, Acta Orthopaedica Belgica.

Source: EMBASE


Author(s): Sodha S, Ring D, Zurakowski D, Jupiter JB

Citation: Journal of Bone & Joint Surgery, American Volume, 01 December 2005, vol./is. 87A/12(2614-2618), 00219355

Publication Date: 01 December 2005

Abstract: BACKGROUND: The age and gender-related prevalence of arthrosis of the trapeziometacarpal joint has been incompletely defined. METHODS: The radiographs of 615 consecutive patients who had presented with an isolated fracture of the distal part of the radius over a two-year period were evaluated for evidence of trapeziometacarpal arthrosis. We used a simple three-grade rating system suitable for standard wrist radiographs. Grade I indicated no or nearly no arthrosis; grade II, obvious arthrosis; and grade III, a totally destroyed joint. This rating system was demonstrated to have adequate intraobserver reliability (average kappa of 0.72, p < 0.001) and interobserver reliability (average kappa of 0.56, p < 0.001). The number of patients with each grade of arthrosis was analyzed according to age and gender. RESULTS: The overall radiographic prevalence of trapeziometacarpal arthrosis in patients presenting for treatment of a distal radial fracture increased steadily from the age of forty-one years onward and reached a prevalence of 91% in patients older than eighty years of age. The prevalence increased more rapidly in women than in men; it reached 94% in women who were older than eighty years of age compared with 85% in men who were older than eighty years of age. The prevalence of grade-III trapeziometacarpal arthrosis (a totally destroyed joint) was much greater in women than in men at all age levels; it reached a prevalence of 66% in women older than eighty years of age compared with 23% in men older than eighty years of age. CONCLUSIONS: The radiographic prevalence of trapeziometacarpal arthrosis in patients presenting for treatment of a distal radial fracture is age-related, and trapeziometacarpal arthrosis is more likely to lead to complete joint destruction in women than it is in men.

Source: CINAHL

Full Text:

Available in fulltext at Ovid

Available in fulltext at Ovid

Available in fulltext at EBSCO Host

Available in print at Grantham Hospital Staff Library
5. (ii) Management of peri-trapezial osteoarthritis.

Author(s): Harrison JWK, Fahmy NRM

Citation: Current Orthopaedics, 01 June 2005, vol./is. 19/3(190-195), 02680890

Publication Date: 01 June 2005

Abstract: The trapeziometacarpal joint or first carpometacarpal joint (CMCJ) is the commonest site of osteoarthritis in the hand causing considerable pain and disability. It most commonly affects post-menopausal females. One in four females over 40 may have radiographic evidence of changes to the trapeziometacarpal joint although most are asymptomatic. Careful clinical examination and radiographic studies will diagnose both the arthritis and the affected joint. The various surgical options generally produce satisfactory results. Therefore, other factors such as the length of the surgery and time for recovery may be important.

Source: CINAHL

Full Text:

Available in fulltext at Pilgrim Hospital Staff Library; Note: Athens login. Once logged in, you must search for the journal title, to access the content.

Available in print at Grantham Hospital Staff Library

Available in print at Louth Medical Library

Available in print at Pilgrim Hospital Staff Library

6. No correlation between trapeziometacarpal arthritis and abductor pollicis longus insertion.

Author(s): Roush TF, Aldridge JM, Berger RA, Rizzo M

Citation: Clinical Orthopaedics & Related Research, 01 May 2005, vol./is. 434/(138-142), 0009921X

Publication Date: 01 May 2005

Abstract: The primary hypothesis of this study is that supernumerary slips of the abductor pollicis longus (particularly those slips inserting distal to the trapeziometacarpal joint) increase the risk of trapeziometacarpal osteoarthritis on account of increased transarticular forces. Other hypotheses surmised that age and female gender were directly correlated with severity of arthritis. We did cadaveric dissection of the distal first dorsal compartment in 61 specimens, noting the cadaveric age, gender, and number and insertion sites of abductor pollicis longus tendon slips. Each variable was statistically correlated with visual grade of trapeziometacarpal arthritis. The median number of abductor pollicis longus tendon slips in these cadaveric hands was three (range, 1-4). Seventy-nine percent of the hands had a digastric-type insertion into the abductor pollicis brevis. Ninety percent had an insertion into the trapezium. All hands possessed an insertion into the base of the first metacarpal. Age and female gender were directly correlated with severity of arthritis. No other correlations existed. We conclude that trapeziometacarpal joint arthritis progresses with age and occurs independently of any aspect of abductor pollicis longus insertion.
Based on our results, we do not recommend surgical release of these supernumerary abductor pollicis longus tendon slips for the treatment of trapeziometacarpal osteoarthritis.

**Source:** CINAHL

**Full Text:**

Available in fulltext at [Ovid](#)

Available in print at [Grantham Hospital Staff Library](#)

7. **In vivo motion of the scaphotrapezio-trapezoidal (STT) joint**

**Author(s):** Sonenblum SE, Crisco JJ, Kang L, Akelman E

**Citation:** Journal of Biomechanics, 2004, vol./is. 37/5(645-52), 0021-9290

**Publication Date:** 2004

**Abstract:** It has previously been shown that the articulation of the scaphotrapezio-trapezial (STT) joint can be modeled such that the trapezoid and trapezium are tightly linked and move together on a single path relative to the scaphoid during all directions of wrist motion. The simplicity of such a model is fascinating, but it leaves unanswered why two distinct carpal bones would have a mutually articulating surface if there were no motion between them, and how such a simplistic model of STT joint motion translates into the more complex global carpal motion. We performed an in vivo analysis of the trapezoids and trapeziums of 10 subjects (20 wrists) using a markerless bone registration technique. In particular, we analyzed the centroid spacing, centroid displacements, kinematics, and postures of the trapezoid and trapezium relative to the scaphoid. We found that, on a gross level, the in vivo STT motion was consistent with that reported in vitro. In addition, we found that the magnitude of trapezoid and trapezium motion was dependent upon the direction of wrist motion. However, we also found that when small rotations and displacements are considered there were small but statistically significant relative motions between the trapezoid and trapezium (0.4 mm in maximum flexion, 0.3 mm in radial deviation and at least 10 degrees in flexion extension and ulnar deviation) as well as slight off-path rotations. The results of this study indicate that the STT joint should be considered a mobile joint with motions more complex than previously appreciated.

**Source:** AMED

2. **Osteoarthritis of the base of the thumb**

**Author(s):** Downing N.D., Davis T.R.C.

**Citation:** Current Orthopaedics, 2001, vol./is. 15/4(305-313), 0268-0890

**Publication Date:** 2001

**Abstract:** Osteoarthritis of the base of the thumb is a very common condition, particularly in post-menopausal women. Although about 30% of post-menopausal women have radiological changes of arthritis, the majority have no or only minor symptoms. Symptomatic osteoarthritis is confirmed by careful physical examination and radiological assessment. The radiological appearance enables classification into four stages of increasing severity and this classification serves as a guide to treatment. Initial treatment consists of non-operative measures, surgery being reserved for disabling symptoms resistant to these measures. The surgical options range from ligament reconstruction or osteotomy for early stage disease (painful laxity), through to trapeziectomy, arthrodesis and arthroplasty for more severe osteoarthritis. There is controversy regarding the optimum surgical treatment option for severe osteoarthritis, and debate as to whether the results of trapeziectomy can be improved by the addition of ligament reconstruction procedures.
Satisfactory results can be achieved by a variety of different surgical treatments. Copyright 2001 Elsevier Science Ltd.

**Source:** EMBASE

**Full Text:**

Available in fulltext at Pilgrim Hospital Staff Library; Note: Athens login. Once logged in, you must search for the journal title, to access the content.

Available in print at Grantham Hospital Staff Library

Available in print at Louth Medical Library

Available in print at Pilgrim Hospital Staff Library

- **8. Carpal fractures in athletes.**

**Author(s):** Geissler WB

**Citation:** Clinics in Sports Medicine, 01 January 2001, vol./is. 20/1(167-188), 02785919

**Publication Date:** 01 January 2001

**Abstract:** A review of the literature shows that 3% to 9% of all athletic injuries occur to the hand or wrist. Also, hand and wrist injuries are more common in pubescent and adolescent athletes than adults. Although knee and shoulder injuries are more common athletic injuries, an injury to the hand or wrist significantly can impair the athlete’s ability to throw or catch a ball, or swing a bat or racquet. A college football player trains year round for just 11 or 12 hours of playing time. An athletic injury that occurs during the season can have profound consequences for the athlete’s career and emotions. When defining a management plan for a particular wrist athletic injury, the time to heal the injury and the time to rehabilitate fully must be considered. The athlete must be informed fully of the length of recovery. The continued advancement of fixation methods and techniques are diminishing fracture morbidity considerably. Small-cannulated compression screws that provide rigid fixation can be inserted with decreased surgical dissection, thus preserving critical vascular supply and promoting accelerated healing and earlier rehabilitation. The arthroscope as a valuable adjunct in the management of wrist fractures was virtually unheard of years ago, but is now common. The ability to arthroscopically guide a cannulated compression screw to stabilize a scaphoid fracture without a formal open volar approach can reduce surgical morbidity significantly and allow the athlete to return to competition more quickly. Mechanisms of injury that cause osseous fractures of the wrist are fairly high energy. A high index of suspicion for associated soft tissue injuries should be kept in mind when fractures of the wrist are identified. The wrist is composed of eight carpal bones tightly interwoven with each other by intrinsic and extrinsic wrist ligaments. The management of carpal fractures depends on prompt diagnosis, stable and anatomic alignment of the involved carpal bone, protective immobilization of the injury, and thorough rehabilitation. Displaced fractures of the hook of the hamate, trapezial ridge fractures, and comminuted pisiform fractures are managed best by early excision to promote uncomplicated recovery and early return to sport. For most athletes, return to competition can be expedited safely with the use of padded gloves and custom playing splints or casts. The sports medicine physician always must put the athlete’s safety first when deciding the appropriate time for return to competition. Copyright © 2001 by W.B. Saunders Company

**Source:** CINAHL

- **9. Wrist fractures in the athlete: distal radius and carpal fractures.**

**Author(s):** Rettig ME, Dassa GL, Raskin KB, Melone CP Jr.
Abstract: The primary prerequisites for optimal management of the athlete's fractured wrist are prompt diagnosis, anatomic and stable reduction, effective immobilization until healing is thorough, and comprehensive rehabilitation of the injured parts. Fulfillment of these fundamental criteria consistently leads to a highly favorable outcome with minimal risk of re-injury. In contrast, a compromise of these principles, especially for the sake of a speedy return to sports, invariably results in suboptimal recovery and, not infrequently, a permanent loss of skills. The exceptions to the cardinal rule that successful treatment of wrist fractures requires precise restoration of anatomic relationships are specific: displaced hamate hook fractures, displaced trapezial ridge fractures, and comminuted pisiform fractures. In such instances, successful union essentially is precluded, and early excision of the displaced fragments is the logical means of facilitating an uncomplicated recovery. For the more complex fractures requiring stabilization, continual refinements in methods of fixation are considerably diminishing fracture morbidity. The availability of small screws that provide rigid fixation of the carpus is, with increasing consistency, promoting accelerated union and rapid rehabilitation. Well-conceived combinations of low-profile, mechanically efficient external fixators and precisely used Kirschner wires achieve highly secure fracture stability for the distal radius that similarly enhances recovery with a minimum of complications. Improvements in both design and application of internal and external fixation techniques undoubtedly constitute a major advance in the management of wrist fractures among athletes. For some athletes, the return to competition can be safely expedited by the use of custom-fit protective gloves, splints, or casts. For most, however, the treatment regimen usually entails a minimum of 3 to 4 months. Although the healing and rehabilitation process is often lengthy and may seem costly, particularly in terms of time lost from competition, seldom do athletes regret the investment once they return to their highly skillful activities unencumbered by wrist impairment. Never does the sports medicine physician regret compliance with the principles of optimal care. Copyright (c) 1998 by W.B. Saunders Company

Source: CINAHL

10. Modified Burton and Pellegrini procedure for trapezium excision, ligament reconstruction and interposition arthroplasty of the tendon of flexor Carpi radialis.

Author(s): Maffulli N, Irwin A, Chesney RB

Citation: Operative Orthopadie und Traumatologie, March 1997, vol./is. 9/1(69-79), 0934-6694

Abstract: GOAL OF SURGERY: Relieve of pain and increased stability at the base of 1st metacarpal. INDICATIONS: Painful degenerative and inflammatory arthritis in trapeziometacarpal joint (TMCJ). CONTRAINDICATIONS: Patients not willing to undergo lengthy intensive postoperative rehabilitation. Rheumatoid arthritis (relative). POSITIONING AND ANAESTHESIA: Supine. Hand table. General or regional anaesthesia. SURGICAL TECHNIQUE: Modification of the Burton-Pelligrini operation by using half of the flexor carpi radialis for interposition between base of 1st metacarpal and scaphoid. Stabilization with a Kirschner wire. In the presence of scaphotrapezial arthritis an arthrodesis of this joint is performed for better pain control. POSTOPERATIVE MANAGEMENT: Immobilization in a below elbow cast for 6 weeks. Then active physiotherapy, night splint for another 6 weeks. POSSIBLE COMPLICATIONS: Fracture while drilling the base of the 1st metacarpus, migration of Kirschner wires, injury to the radial artery and cutaneous nerves. RESULTS: Out of 15 patients 12 (14 thumbs) were followed for at least 6 months. In 11 patients the shape of the hand was normal and 10 patients were satisfied with the result of the operation. Complications included: twice postoperative migration of Kirschner wires, and once intraoperative tearing of the tendon which had to be sutured.
11. Normal kinematics of carpal bones: a three-dimensional analysis of carpal bone motion relative to the radius.


Citation: Journal of Biomechanics, 1997, vol./is. 30/8(787-93)

Publication Date: 1997

Abstract: Normal carpal kinematics were studied in 22 cadaver specimens using a biplanar radiography method. The kinematics of the trapezium, capitate, hamate, scaphoid, lunate, and triquetrum were determined during wrist motion in sagittal and coronal planes. The results were expressed using the concept of the screw displacement axis and converted to describe the magnitude of rotation about and translation along three axes (X-axis: pronation-supination axis, Y-axis: flexion-extension axis, and Z-axis: radial-ulnar deviation axis) commonly used for the wrist. The orientation of these axes is expressed relative to the radius. Within the proximal carpal row, considerable differences of carpal behavior around the Y-axis were observed during sagittal plane motion of the wrist. The scaphoid exhibited the greatest magnitude of rotation, and the lunate the least. The magnitude of rotation of the carpal bones around the X-axis during sagittal plane motion of the wrist was small. The proximal carpal bones exhibited some ulnar deviation in 60 degrees of wrist flexion. During coronal plane motion of the wrist, the magnitude of radial-ulnar deviation of the distal carpal bones was mutually similar and generally of a greater magnitude than that of the proximal carpal bones. The proximal carpal bones experienced some flexion during radial deviation of the wrist and extension during ulnar deviation of the wrist. Translation was generally minimal in all carpal bones throughout wrist motion. This study reports results from the largest cadaver wrist kinematics study completed to date. The accuracy of the current method was improved when compared to previous studies. A sufficient number of specimens to allow statistical comparison was (ABSTRACT TRUNCATED)

Source: AMED

12. Trapeziometacarpal abnormalities in Ehlers-Danlos syndrome.

Author(s): Gamble JG, Mochizuki C, Rinsky LA

Citation: Journal of Hand Surgery - American Volume, January 1989, vol./is. 14/1(89-94), 0363-5023

Publication Date: January 1989

Abstract: We studied 24 patients with Ehlers-Danlos syndrome with particular attention to the thumb and the trapeziometacarpal joint. The 11 males and 13 females had a mean age of 15.9 years. Symptomatic complaints included pinch, grip and twisting weakness; measurements showed dominant hand strength deficits of 71% for tip pinch, 55% for palmar pinch, 46% for key pinch, and 70% for grip. All finger joint ranges of motion were increased. Sixty-six percent of all the patients had trapeziometacarpal subluxation; 29% had dislocation. Sixteen percent had radiographic evidence of arthritis. Early occupational therapy evaluation and education can help these patients better understand and adapt to their limitations.

Source: MEDLINE

13. Treatment of scaphoid fractures with a removable cast.

Author(s): Terkelsen CJ, Jepsen JM
Citation: Acta Orthopaedica Scandinavica, August 1988, vol./is. 59/4(452-3), 0001-6470

Publication Date: August 1988

Abstract: Forty-four fractures of the scaphoid bone were treated with a short-term removable orthoplast cast and compared with 48 fractures treated with a conventional long-arm plaster cast. At the follow-up, there was no difference between the two treatment groups as regards nonunion or other sequelae. We conclude that the inconvenience of the treatment of scaphoid fracture and the need of physiotherapy can be reduced by using an orthoplast cast.

Source: MEDLINE

Google Scholar

Rare Isolated Trapezoid Fracture: A Case Report

- Online York Hospital Library
RM Sadowski, RD Montilla - Hand, 2008 - Springer
... He also began hand therapy, which included passive and active range of motion. ... Discussion The trapezoid is the least commonly fractured carpal bone [8 ...]

[PDF] ... dislocations and an ipsilateral scapho-trapezium-trapezoid fracture-dislocation: a rare ...

- Online York Hospital Library
... a period of immobilisation followed by intensive hand therapy. ... Carpal bone dislocations: an analysis of twenty ... of trapezium-scaphoid-trapezoid dislocation and ...

Unilateral osteonecrosis in a patient with bilateral os centrale carpi

LB Lane, ES Gould, PD Stein, E Coffey - The Journal of Hand Surgery, 1990 - Elsevier
... and its relationship to the adjacent carpal bones ... opposing surfaces of the scaphoid, trapezoid, and capitate ... 4 weeks after which time a hand therapy program was ...

Complications of intercarpal arthrodesis

JA McAuliffe, PC Dell, R Jaffe - The Journal of Hand Surgery, 1993 - Elsevier
... Paired hand therapy evaluations, including preoperative and ... 9. Outcome of Scaphoid Trapezeoid Trapezium Arthrodesis for Carpal Instability Static ...

Google Advanced Search

MD Consult - Disabling Hand Injuries in Boxing: Boxer's Knuckle ...

Traumatic Carpal Boss: Diagnosis and Operative Treatment ... subluxation from the adjacent carpal trapezoid, capitate, and hamate articulations. ... wires are removed in the office and an intensive program of hand therapy is initiated. ... For both boxer's knuckle and traumatic carpal boss the outcome of operative ...

www.mdconsult.com/das/clinics/view/0/N/22579656?ja=716158...

Hand and wrist problems in primary care -- Warwick 2 (10): 570 ...

In carpal tunnel syndrome, the nerve is compressed as it runs beneath the ..... pain from an
underlying arthritis of the scaphoid–trapezium–trapezoid (STT) joint. ... straightforward and expert post-operative hand therapy is essential. ...
rcgp-innovait.oxfordjournals.org/cgi/content/full/2/10/570
by D Warwick – 2009