

# Physiotherapy Outpatients

# **Evidence Update**



February 2018 (Quarterly)

Respecting everyone Embracing change Recognising success Working together Our hospitals.



## Training Calendar 2018

#### All sessions are **one hour**

#### February (12.00-13.00)

1st (Thu) Literature Searching 9th (Fri) Critical Appraisal

12th (Mon) Statistics

20th (Tue) Literature Searching28th (Wed) Critical Appraisal

#### March (13.00-14.00)

8th (Thu) Statistics

12th (Mon) Literature Searching20th (Tue) Critical Appraisal

28th (wed) Statistics

#### April (12.00-13.00)

5th (Thu) Literature Searching 9th (Mon) Critical Appraisal

17th (Tue) Statistics

25th (Wed) Literature Searching

## Your Outreach Librarian - Helen Pullen

Whatever your information needs, the library is here to help. Just email us at library@uhbristol.nhs.uk

**Outreach:** Your Outreach Librarian can help facilitate evidence-based practice for everyone in the team, as well as assisting with academic study and research. We also offer one-to-one or small group training in **literature searching, critical appraisal and medical statistics**. Get in touch: library@uhbristol.nhs.uk

**Literature searching:** We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a one-to-one session where we can guide you through the process of creating a well-focused literature research. Please email requests to <a href="mailto:library@uhbristol.nhs.uk">library@uhbristol.nhs.uk</a>

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## **Latest Evidence**

NICE National Institute for Health and Care Excellence

<u>Physiotherapists use a small number of behaviour change techniques when promoting physical activity:</u> A systematic review comparing experimental and observational studies

Source: PubMed - 07 December 2017 - Publisher: Journal Of Science And Medicine In Sport

studies. METHODS: Twelve databases were searched using terms related to physiotherapy and physical activity. We included experimental...



Non-pharmacological interventions for treating chronic prostatitis/chronic pelvic pain syndrome

Source: Cochrane Database of Systematic Reviews - 26 January 2018

physical therapy. In many cases, these therapies were given to men in an outpatient setting. Most studies did not specify their funding...

# **UpToDate®**

OpenAthens login required. Register here: https://openathens.nice.org.uk/

## **Journal Tables of Contents**

Click on the hyperlinked title (+Ctrl) for the current contents of key journals. If you would like any of the papers in full text then please email the library: library@uhbristol.nhs.uk

## **Musculoskeletal Science and Practice**

December 2017, Volume 32

## **Physiotherapy**

December 2017, Volume 103, Issue 4

#### **BMI**

February 2018

## **Spine**

**February 15, 2018, Volume 43, Issue 4** 

## **British Journal of Sports Medicine**

February 2018, Volume 52, Issue 4



## **Library Clinic**

Stop by and find out more about our services. We will be here to answer any questions you may have!

March 7<sup>th</sup>: **Canteen (Level 9, BRI)** *12.00-14.00* 

March 19<sup>th</sup>: Welcome Centre, BRI 10.00-16.00

April 4<sup>th</sup>: **Foyer, Education Centre** *12.00-14.00* 

April 11<sup>th</sup>: **Foyer, St Michael's Hospital** *12.00-14.00* 

May 2<sup>nd</sup>: Canteen (Level 9, BRI) 12.00-14.00

June 6<sup>th</sup>: **Terrace (Level 4, Education Centre)** *12.00-14.00* 

June 19<sup>th</sup>: Welcome Centre, BRI 10.00-16.00

July 3<sup>rd</sup>: Welcome Centre, BRI 10.00-16.00

July 4<sup>th</sup>: Canteen (Level 9, BRI) 12.00-14.00

August 8<sup>th</sup>: **Foyer, Education Centre** *12.00-14.00* 

August 29<sup>th</sup>: Foyer, St Michael's Hospital 12.00-14.00

September 5<sup>th</sup>: **Canteen (Level 9, BRI)** 12.00-14.00

September 11<sup>th</sup>: **Welcome Centre, BRI** 10.00-16.00

October 3<sup>rd</sup>: Terrace (Level 4, Education Centre) 12.00-14.00

November 7<sup>th</sup>: Canteen (Level 9, BRI) 12.00-14.00

December 5<sup>th</sup>: **Foyer, Education Centre** *12.00-14.00* 

December 11<sup>th</sup>: **Welcome Centre, BRI** 10.00-16.00

#### **Recent Database Articles**

Below is a selection of articles recently added to the healthcare databases, grouped into the following categories:

- Achilles Tendon Rupture
- Anterior Cruciate Ligament Repair
- Cervical Spine Disc
- Shoulder Impingement and Dislocation

If you would like any of the following articles in full text, or if you would like a more focused search on your own topic, then get in touch:

<u>library@uhbristol.nhs.uk</u>

1. Functional Outcome of Acute Achilles Tendon Rupture With and Without Operative Treatment Using Identical Functional Bracing Protocol.

Author(s): Lim, Che Siu; Lees, David; Gwynne-Jones, David P.

Source: Foot & Ankle International; Dec 2017; vol. 38 (no. 12); p. 1331-1336

Publication Date: Dec 2017

Publication Type(s): Academic Journal

Abstract: Background: The purpose of this study was to compare the functional results of operative and nonoperative treatment of acute Achilles tendon rupture using an identical rehabilitation program of functional bracing. Methods: Over a 10-year period, 200 patients (99 operative, 101 nonoperative) aged between 18 and 65 years were treated at our institution's physiotherapy department after acute Achilles tendon rupture. There were 132 patients (62 operative, 70 nonoperative) available for a minimum 2-year follow-up (average 6.5 years; range, 2-13 years). Functional outcome was assessed using the Achilles tendon total rupture score (ATRS). Results: With the numbers available, no significant difference could be detected in ATRS between operative (mean 84.8, median 90) and nonoperative groups (mean 85.3, median 91; P = 0.55). No significant difference could be detected in ATRS between male and female patients however treated (P = 0.30) or between patients younger and older than 40 years at time of injury (P = 0.68). There was no correlation between ATRS score and age at injury in all patients ( $\rho = -0.0168$ , P = 0.85). In male patients, there was a weak trend with older patients at follow-up having better scores (p = 0.21, P =0.069). However, among female patients, there was a significant negative correlation between ATRS scores and increasing age ( $\rho = -0.29$ , P = 0.03). Logistic regression analysis failed to show any significant effect of age at rupture, gender, or mode of treatment on ATRS. Conclusions: This study showed no significant difference detectable in ATRS between operative and nonoperative patients in the treatment of acute Achilles tendon ruptures using an identical rehabilitation program with functional bracing. Level of Evidence: Level II, prospective comparative study.

**Database: CINAHL** 

2. Exploring the teaching and learning of clinical reasoning, risks, and benefits of cervical spine manipulation.

Author(s): Yamamoto, Katie; Condotta, Luca; Haldane, Chloe; Jaffrani, Sahar; Johnstone, Victoria;

Jachyra, Patrick; Gibson, Barbara E; Yeung, Euson

Source: Physiotherapy theory and practice; Feb 2018; vol. 34 (no. 2); p. 91-100

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 29053390

Abstract:The aim of this study was to examine how risks and benefits of cervical spine manipulation (CSM) were framed and discussed in the context of mentorship and their impact on the perception of safe practice of CSM in clinical physiotherapy settings. A multi-method qualitative approach was employed, including a document analysis of established educational guidelines, observations of mentoring sessions, and individual face-to-face interviews with five mentees in the process of learning CSM, and four mentors with Orthopedic Manual Physical Therapy (OMPT) certification. Results demonstrated that participants' clinical decision-making processes to perform CSM were primarily oriented to the mitigation of risk. Achieving proficiency in the "science" of clinical reasoning and the "art" of "feel" related to mastering technical skills were viewed as means to mitigating risk and enhancing confidence to use CSM safely in clinical practice. While the "art" of technical skill mastery was of high importance to mentees and considered important to developing competency in performing CSM, it was discussed as distinct from their clinical reasoning processes. Thus, promoting a more balanced and integrated use of the "art" and "science" of safe practice for CSM in OMPT training may result in greater confidence and judicious use of CSM by physiotherapists.

Database: Medline

# 3. Comparison of 2 Exercise Rehabilitation Programs for Multidirectional Instability of the Glenohumeral Joint: A Randomized Controlled Trial.

**Author(s):** Warby, Sarah A; Ford, Jon J; Hahne, Andrew J; Watson, Lyn; Balster, Simon; Lenssen, Ross; Pizzari, Tania

Source: The American journal of sports medicine; Jan 2018; vol. 46 (no. 1); p. 87-97

Publication Date: Jan 2018

**Publication Type(s):** Journal Article

PubMedID: 29048942

Abstract: BACKGROUNDThe recommended initial treatment for multidirectional instability (MDI) of the shoulder is a rehabilitation program, yet there is very low-quality evidence to support this approach. Purpose/Hypothesis: The purpose was to compare the Watson MDI program and Rockwood Instability program among patients with nontraumatic, nonstructural MDI. The hypothesis was that the Watson MDI program would produce clinically and statistically superior outcomes over the Rockwood Instability program.STUDY DESIGNRandomized controlled trial; Level of evidence, 2.METHODSForty-one participants with MDI were randomly allocated to the Watson MDI or Rockwood Instability program. Participants attended 12 weekly physiotherapy sessions for exercise prescription. Outcomes were assessed at baseline and 6, 12, and 24 weeks after randomization. Primary outcomes were the Melbourne Instability Shoulder Score (MISS) and the Western Ontario Shoulder Index (WOSI). Secondary outcomes included the Orebro Musculoskeletal Pain Questionnaire, pain, muscle strength, scapular upward rotation, scapular coordinates, global rating of change, satisfaction scales, limiting angle in abduction range, limiting factor in abduction range, and incidence of dislocation. Primary analysis was by intention to treat based on linear mixed models.RESULTSBetween-group differences showed significant effects favoring the Watson program for the WOSI (effect size [ES], 11.1; 95% CI, 1.9-20.2; P = .018) and for the limiting factor in abduction (ES, 0.1; 95% CI, 0.0-1.6; P = .023) at 12 weeks, and for the WOSI (ES, 12.6; 95% CI, 3.4-21.9; P = .008), MISS (ES, 15.4; 95% CI, 5.9-24.8; P = .002), and pain (ES, -2.0; CI: -2.3 to -0.7, P = .003) at 24 weeks.CONCLUSIONFor people with MDI, 12 sessions of the Watson MDI program were more effective than the Rockwood program at 12- and 24-week follow-up. Registration: ACTRN12613001240730 (Australian New Zealand Clinical Trials Registry).

**Database:** Medline

# 4. Risk Factors for Failed Nonoperative Treatment and Rerupture in Acute Achilles Tendon Rupture.

Author(s): Reito, Aleksi; Logren, Hanna-Liina; Ahonen, Katri; Nurmi, Heikki; Paloneva, Juha

Source: Foot & ankle international; Jan 2018; p. 1071100717754042

Publication Date: Jan 2018

Publication Type(s): Journal Article

**PubMedID: 29380628** 

Abstract:BACKGROUNDNonoperative treatment is feasible in most patients with acute Achilles tendon rupture. Risk factors associated with failed nonoperative treatment are poorly understood. We investigated risk factors associated with rerupture after nonoperative treatment and otherwise failed nonoperative treatment of Achilles tendon rupture. METHODSAII patients diagnosed with acute Achilles tendon rupture between January 2009 and June 2016 and who underwent 8 weeks of nonoperative treatment with functional rehabilitation were included in the study. Patients with rerupture or otherwise failed nonoperative treatment were identified retrospectively. Time to rerupture and association of age, sex, time from injury, diabetes, and visits to the physiotherapist for cases of reruptures and otherwise failed nonoperative treatment were investigated. A total of 210 patients were included in the study.RESULTSFifteen patients sustained a rerupture. Rerupture incidence was 7.1%. Incidence of late reruptures, those occurring after return to daily activities at 12 weeks, was 1.9%. Six patients had otherwise failed nonoperative treatment. Median time to rerupture was 23 days (6 to 61) after the end of the treatment. The incidence of all-cause failure was 10.0%. Male gender was associated with reruptures (P = .013) and failed nonoperative treatment for any reason (P = .029). CONCLUSIONIt is important to highlight the increased risk of rerupture in male patients during the first month after the end of the nonoperative treatment. Age alone, even in male patients, was a poor indication for operative treatment since it did not predict early failure. Further studies will hopefully clarify the influence of activity level on the risk of rerupture.LEVEL OF EVIDENCELevel IV, retrospective case series.

Database: Medline

#### 5. Dynamic brace is a good option to treat first anterior shoulder dislocation in season.

Author(s): Conti, M; Garofalo, R; Castagna, A; Massazza, G; Ceccarelli, E

**Source:** Musculoskeletal surgery; Dec 2017; vol. 101; p. 169-173

Publication Date: Dec 2017

Publication Type(s): Journal Article

**PubMedID: 28770511** 

**Abstract**:PURPOSEWe evaluate the ability of in-season competitive athletes to return to competition after an anterior shoulder instability treated conservatively with a new dynamic brace combined with a specific rehabilitation program.METHODSTwenty soccer players affected by traumatic anterior shoulder dislocation have been enrolled in the "Footballer In Season Fast Rehab" project

during 2 consecutive football seasons. We excluded patients affected by rotator cuff tears and the bony defect over 25%. All the players have been treated the day after the first dislocation with a new dynamic brace used until the end of the second month after the first glenohumeral dislocation combined with a specific rehab protocol. Athletes were evaluated for the time necessary to completely resume sport activities, to complete the season, and for the recurrence of dislocation.RESULTSAll the athletes enrolled in this study were able to come back on the ground in approximately 40 days after the dislocation except 2 of them. Only two athletes claimed a slight discomfort at the return to play. One athlete had a traumatic relapse of the instability, 50 days after the dislocation. Another athlete claimed to have had a subluxation during a training session 45 days after the dislocation. 90% of the athletes were able to end the season without any shoulder discomfort.CONCLUSIONSThe dynamic brace combined to the rehabilitation protocol represents the solution that allows a quick start of resumption of training while maintaining a stable pain-free shoulder.LEVEL OF EVIDENCELevel 4.

Database: Medline



## **Library Opening Times**

Staffed hours: 8am-5pm, Monday to Friday

Swipe-card access: 7am-11pm, Seven days a week

Level 5, Education and Research Centre
University Hospitals Bristol

Contact your Outreach Librarian:

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