This search summary contains the results of a literature search undertaken by the Lincolnshire Knowledge and Resource Service librarians in January 2010.

All of the literature searches we complete are tailored to the specific needs of the individual requester. If you would like this search re-run with a different focus, or updated to accommodate papers published since the search was completed, please let us know.

We hope that you find the information useful. If you would like the full text of any of the abstracts listed, please let us know.

Alison Price  alison.price@lpct.nhs.uk  
Janet Badcock  janet.badcock@lpct.nhs.uk

Librarians, Lincolnshire Knowledge and Resource Service
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. A feedback form is included with these search results. We would be very grateful if you had the time to complete it for us, so that we can monitor satisfaction with the service we provide.

Thank you!

Disclaimer

Every effort has been made to ensure that this information is accurate, up-to-date, and complete. However it is possible that it is not representative of the whole body of evidence available. All links from this resource are provided for information only. A link does not imply endorsement of that site and the Lincolnshire Knowledge and Resource Service does not accept responsibility for the information displayed there, or for the wording, content and accuracy of the information supplied which has been extracted in good faith from reputable sources. No responsibility can be accepted for any action taken on the basis of this information. It is the responsibility of the requester to determine the accuracy, validity and interpretation of the search results.

Articles and internet resources may contain errors or out-of-date information.

Lincolnshire Knowledge & Resource Service
Beech House, Witham Park, Waterside South, Lincoln LN5 7JH
Resources 01522 550656 Library 01522 550658
Leaflets 01522 550657 Fax 01522 516723
Email library_lkrs@lincolnshire.gov.uk
Health Libraries in Lincolnshire Online www.hello.nhs.uk

Literature Search Results

Search completion date: 28th January 2010
Search completed by: Janet Badcock

Enquiry Details

Talipes
Opening Internet Links
The links to internet sites in this document are ‘live’. If you are on a computer with internet access, you can open the documents by using your mouse to place the cursor over the web address. Then hold down the CTRL key on your keyboard and then click on the address. The document, or internet page, should open. For Athens resources, see below:

Full Text Papers
Links are given to full text papers where available. For many of the papers, you will need a free NHS Athens Account. If you do not have an account you can register by following the steps at: https://register.athensams.net/nhs/nhseng/
You can then access the papers by simply entering your username and password.
If you do not have easy access to the internet to gain access, please let us know and we can download the papers for you.

Evidence and Guidelines

Physiotherapy Management of Positional Talipes Equinovarus

Research

Title: Early results of a physiotherapist-delivered Ponseti service for the management of idiopathic congenital talipes equinovarus foot deformity.
Citation: Journal of Bone & Joint Surgery, British Volume, 01 August 2006, vol./is. 88B/8(1085-1089), 0301620X
Author(s): Shack N, Eastwood DM
Abstract: We studied 24 children (40 feet) to demonstrate that a physiotherapist-delivered Ponseti service is as successful as a medically-led programme in obtaining correction of an idiopathic congenital talipes equinovarus deformity. The median Pirani score at the start of treatment was 5.5 (mean 4.75; 2 to 6). A Pirani score of >/=5 predicted the need for tenotomy (p < 0.01). Of the 40 feet studied, 39 (97.5%) achieved correction of deformity. The remaining foot required surgical correction. A total of 25 (62.5%) of the feet underwent an Achilles tenotomy, which was performed by a surgeon in the physiotherapy clinic. There was full compliance with the foot abduction orthoses in 36 (90%) feet. Continuity of care was assured, as one practitioner was responsible for all patient contact. This was rated highly by the patient satisfaction survey. We believe that the Ponseti technique is suitable for use by non-medical personnel, but a holistic approach and good continuity of care are essential to the success of the programme.
Publication Type: journal article

Title: Increasing incidence of clubfoot Changes in the genes or the environment?
Citation: Acta Orthopaedica, 01 December 2006, vol./is. 77/6(837-838), 17453674
Author(s): Engesæter LB
Publication Type: journal article
Full Text: Available in fulltext at EBSCO Host
This paper is available in full text with an NHS Athens account.
Title: Clubfoot: an orthopaedic surgeon describes clubfoot and current treatment methods.
Citation: Exceptional Parent, 01 March 2007, vol./is. 37/3(48-50), 00469157
Author(s): Vitale M, Irving H
Abstract: Michael Vitale, MD, describes treatment methods for clubfoot.
Publication Type: journal article
Full Text: Available in fulltext at EBSCO Host

This paper is available in full text with an NHS Athens account.

Title: Congenital talipes equinovarus: A REVIEW OF CURRENT MANAGEMENT.
Citation: Journal of Bone & Joint Surgery, British Volume, 01 August 2007, vol./is. 89B/8(995-1000), 0301620X
Author(s): Siapkara A, Duncan R
Abstract: Talipes equinovarus is one of the more common congenital abnormalities affecting the lower limb and can be challenging to manage. This review provides a comprehensive update on idiopathic congenital talipes equinovarus with emphasis on the initial treatment. Current management is moving away from operative towards a more conservative treatment using the Ponseti regime. The long-term results of surgical correction and the recent results of conservative treatment will be discussed.
Publication Type: journal article

Title: Paediatric nursing. Using ‘cling film’ to protect lower limb plaster casts in babies with club foot.
Citation: British Journal of Nursing (BJN), 11 October 2007, vol./is. 16/18(1140-1142),
Author(s): Patel NK, Jeer PJS, Cornell MS
Abstract: Club foot or congenital talipes equinovarus is a common condition affecting babies and non-surgical treatment involves serial manipulation and plaster casting for many weeks. The casts are susceptible to soiling during this time which makes management and child care even more challenging. The authors report initial experience in a typical district general hospital club foot clinic where the parents of a baby used conventional cling film to cover the casts and provide a low-cost, effective and well-tolerated method of protection. Informal reports received from these parents were very positive and encouraging throughout the duration of treatment. The authors believe parents with babies undergoing such treatment for club foot could be advised of the benefits of using cling film to protect plaster casts. More formal analysis of feedback from parents and collaborative experience with other hospitals is required before widespread use is recommended. There may also be scope for using cling film to protect lower limb casts used in managing developmental dysplasia of the hip or fractures in children and potentially adults.
Publication Type: journal article
Full Text: Available in fulltext at EBSCO Host

This paper is available in full text with an NHS Athens account.
Impact of congenital talipes equinovarus etiology on treatment outcomes.

Citation: Developmental Medicine & Child Neurology, 01 July 2008, vol./is. 50/7(498-502), 00121622

Author(s): Gurnett CA, Boehm S, Connolly A, Reimschisel T, Dobbs MB

Abstract: Although congenital talipes equinovarus (CTEV) is often idiopathic, additional birth defects occur in some patients that may have an impact on the treatment of this disorder. The purpose of this study was to determine the prevalence of associated malformations, chromosomal abnormalities, or known genetic syndromes, and to compare treatment outcomes of children with idiopathic CTEV with children with non-idiopathic CTEV. Of 357 children evaluated, 273 (76%) had idiopathic CTEV (179 males, 94 females; mean age 2y 1mo [SD 1y 2mo], range 0-18y) and 84 (24%) had non-idiopathic CTEV (51 males, 33 females; mean age 2y 5mo [SD 2y], range 0-16y). Disorders affecting the nervous system were found in 46 (54%) children with non-idiopathic CTEV. In a subgroup of patients treated entirely at our institution (n=196), children with non-idiopathic CTEV (n=47) required more casts for correction than those with idiopathic CTEV (n=149; 5.3 vs 4.6; p=0.016). There was also a greater risk of recurrence in non-idiopathic CTEV (14.9% vs 4%; p=0.009), but no significant difference in the need for extensive surgery (2.7% vs 8.5%; p=0.096). Treatment was initiated at a mean age of 13 weeks (range 1wk to 2y 6mo) for both idiopathic and non-idiopathic patients, and treatment was assessed during a minimum 2-year follow-up. Non-idiopathic CTEV can be successfully treated with the Ponseti method of serial casting, with low recurrence rates or need for surgery.

Management of congenital talipes equinovarus by ponseti technique: a clinical study.

Citation: Journal of Foot & Ankle Surgery, 01 November 2008, vol./is. 47/6(541-545), 10672516

Author(s): Abbas M, Qureshi OA, Jeelani LZ, Azam Q, Khan AQ, Sabir AB

Abstract: The purpose of this study was to evaluate the early results of treatment of idiopathic congenital talipes equinovarus (CTEV) by the Ponseti method and compare the results with those of other manipulation techniques and surgical treatment reported in the literature. A total of 100 patients with 156 clubfeet (80 males, 20 females), were treated for idiopathic CTEV by the Ponseti method. The average age at presentation was 4.5 months. Scoring of each foot was done according to the Pirani score. Photographs showing the deformity and podograms were taken to have an objective record against which the results were compared. The mean total Pirani score at the start of treatment was 4.26 and mean foot print angle (FPA) was 14.2°. Post correction, there was a significant difference (P < .001, z = 18.638) in the mean FPA. There was also a statistically significant difference between the pre- and postcorrection Pirani scores (P < .001, z = 55.427). In 95% of the patients correction of the deformity was achieved. The Ponseti technique is based on sound understanding of the pathoanatomy of clubfoot. The good results obtained by the Ponseti technique show that posteromedial soft tissue release may no longer be required for most cases of idiopathic CTEV. Level of Clinical Evidence: 2.
Title: **Blue notes. Club foot: rising incidence--why?**
**Citation:** Orthopedics, 01 December 2008, vol./is. 31/12(1175-1175), 01477447  
**Publication Type:** journal article

Title: **A review of talipes equino varus.**  
**Citation:** Podiatry Management, 01 February 2009, vol./is. 28/2(167-174), 07443528  
**Author(s):** Stabile RJ, Giorgini RJ  
**Abstract:** Here's an update on the latest treatments for clubfoot.  
**Publication Type:** journal article  
**Full Text:**  
Available in **fulltext** at EBSCO Host  
This paper is available in full text with an NHS Athens account.

Title: **Update on clubfoot: etiology and treatment.**  
**Citation:** Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1146-1153), 0009921X  
**Author(s):** Dobbs MB, Gurnett CA  
**Publication Type:** journal article  
**Full Text:**  
Available in **fulltext** at National Library of Medicine  
This paper is available in full text with an NHS Athens account.

Title: **The association between idiopathic clubfoot and increased internal hip rotation.**  
**Citation:** Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1231-1237), 0009921X  
**Author(s):** Howlett JP, Mosca VS, Bjornson K  
**Publication Type:** journal article  
**Full Text:**  
Available in **fulltext** at National Library of Medicine  
This paper is available in full text with an NHS Athens account.

Title: **Evaluation of a disease-specific instrument for idiopathic clubfoot outcome.**  
**Citation:** Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1256-1262), 0009921X  
**Author(s):** Dietz FR, Tyler MC, Leary KS, Damiano PC  
**Publication Type:** journal article  
**Full Text:**  
Available in **fulltext** at National Library of Medicine  
This paper is available in full text with an NHS Athens account.

Title: **Ponseti treatment for idiopathic clubfoot: minimum 5-year followup.**  
**Citation:** Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1263-1270), 0009921X  
**Author(s):** Bor N, Coplan JA, Herzenberg JE  
**Publication Type:** journal article  
**Full Text:**  
Available in **fulltext** at National Library of Medicine  
This paper is available in full text with an NHS Athens account.
Title: Clubfoot treatment: Ponseti and French functional methods are equally effective.
Citation: Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1278-1282), 0009921X
Author(s): Faulks S, Richards BS
Publication Type: journal article
Full Text: Available in full text at National Library of Medicine

Title: Correction of arthrogrypotic clubfoot with a modified Ponseti technique.
Citation: Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1283-1293), 0009921X
Author(s): van Bosse HJ, Marangoz S, Lehman WB, Sala DA
Publication Type: journal article
Full Text: Available in full text at National Library of Medicine

Title: What proportion of patients need extensive surgery after failure of the Ponseti technique for clubfoot?
Citation: Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1294-1297), 0009921X
Author(s): Willis RB, Al-Hunaishel M, Guerra L, Kontio K
Publication Type: journal article
Full Text: Available in full text at National Library of Medicine

Title: Correcting residual deformity following clubfoot releases.
Citation: Clinical Orthopaedics & Related Research, 01 May 2009, vol./is. 467/5(1326-1333), 0009921X
Author(s): Kuo KN, Smith PA
Publication Type: journal article
Full Text: Available in full text at National Library of Medicine

Title: Comparison of surgeon and physiotherapist-directed Ponseti treatment of idiopathic clubfoot.
Citation: Journal of Bone & Joint Surgery, American Volume, 01 May 2009, vol./is. 91/5(1101-1108), 00219355
Author(s): Janicki JA, Narayanan UG, Harvey BJ, Roy A, Weir S, Wright JG
Abstract: BACKGROUND: Increasingly, the Ponseti method has been adopted worldwide as the preferred method of managing idiopathic clubfoot deformity. Following the successful implementation of the Ponseti method by orthopaedic surgeons in our institution, a clubfoot clinic was established in 2003. This clinic is directed by a physiotherapist who, using the Ponseti protocol, performs the serial cast treatment and supervises the brace management of all children with idiopathic clubfoot deformity. The purpose of this study was to compare the outcomes of physiotherapist-directed with surgeon-directed Ponseti cast treatment of idiopathic clubfeet. METHODS: We
performed a retrospective cohort study of all patients with idiopathic clubfoot deformity treated from 2002 to 2006 and followed for a minimum of two years. Twenty-five children (thirty-four clubfeet) treated by surgeons were compared with ninety-five children (137 clubfeet) treated by a physiotherapist. The outcomes that were evaluated included the number of casts required, the rate of percutaneous Achilles tenotomy, the rate of recurrence, the failure rate, and the need for additional surgical procedures. RESULTS: At the time of presentation, the patients in the two groups were similar in terms of age, sex distribution, laterality of the clubfoot, and history of treatment. The mean duration of follow-up was thirty-four months in the physiotherapist-directed group and forty-eight months in the surgeon-directed group. No significant difference was found between the two groups with regard to the mean number of initial casts, the Achilles tenotomy rate, or the failure rate. Recurrence requiring additional treatment occurred in 14% of the feet in the physiotherapist-directed group and in 26% of the feet in the surgeon-directed group (p = 0.075). Additional procedures, including repeat Achilles tenotomy or a limited posterior or posteromedial release, were required in 6% of the feet in the physiotherapist-directed group and in 18% of those in the surgeon-directed group (p = 0.025). CONCLUSIONS: In our institution, the Ponseti method of cast treatment of idiopathic clubfeet was as effective when it was directed by a physiotherapist as it was when it was directed by a surgeon, with fewer recurrences and a less frequent need for additional procedures in the physiotherapist-directed group. The introduction of the physiotherapist-supervised clubfoot clinic at our institution has been effective without compromising the quality of care of children with clubfoot deformity.

**Publication Type**: journal article

**Title**: The parent's experience of clubfoot diagnosis across the UK.

**Citation**: Ultrasound, 01 August 2009, vol./is. 17/3(172-176), 1742271X

**Author(s)**: Shelton RS, Banton S

**Publication Type**: journal article

**Title**: Comparison of Ponseti versus surgical treatment for idiopathic clubfoot: a short-term preliminary report.

**Citation**: Clinical Orthopaedics & Related Research, 01 October 2009, vol./is. 467/10(2668-2676), 0009921X

**Author(s)**: Zwick EB, Kraus T, Maizen C, Steinwender G, Linhart WE

**Publication Type**: journal article

**Full Text**: Available in full text at National Library of Medicine

**This paper is available in full text with an NHS Athens account.**

**Title**: Ankle valgus and subtalar varus in treated clubfoot.

**Citation**: Journal of Foot & Ankle Surgery, 01 November 2009, vol./is. 48/6(615-619), 10672516

**Author(s)**: Nabeshima Y, Mori H, Fujii H, Ozaki A, Mitani M, Fujioka H

**Abstract**: The purpose of this study was to clarify whether residual subtalar varus in treated clubfoot affects the configuration of the ankle joint in the coronal plane. Radiographic characteristics of the ankle and subtalar joint in congenital clubfoot, after a minimum of 10 years of treatment, were analyzed and presented. Weight-bearing radiographs of the ankles and feet, as well as computerized tomographic images of the hindfoot, were obtained for 30 patients (41 feet), at a mean of 15.2 +/- 6.1 years after initial treatment. Subtalar varus was measured in terms of the tilting angle of the posterior facet of the talocalcaneal joint, as viewed using computerized tomographic
scans, and a larger angle was indicative of greater subtalar varus. Ankle valgus was measured with anteroposterior mortise views; a larger angle was indicative of greater ankle valgus. The analyses showed that feet with greater subtalar varus also showed statistically significantly greater valgus of the ankle mortise angles (P = .003). These results suggest that the ankle compensates for residual deformity of the subtalar joint in the coronal plane in patients treated for clubfoot. It also suggests that the configuration of the ankle during the course of treatment may warrant closer attention. Level of Clinical Evidence: 2.

Publication Type: journal article

Additional Material

NHS Choices information
Club foot is a deformed ankle and foot and is present at birth. The ankle is twisted, the foot points down and inwards and the soles of the feet face each other. This happens because the tendons on the inside of the leg have shortened, the bones are abnormally shaped and the Achilles tendon (at the back of the heel) has tightened. In 50% of cases of club foot, both the feet are affected (bilateral).
Some people refer to club foot as talipes; in fact, there are two types of talipes:
- congenital talipes equinovarus (club foot), and
- talipes calcaneovalgus, where the foot points upwards and outwards.
These pages focus on club foot. To view the full document, follow the link below:
http://www.nhs.uk/Conditions/Talipes/Pages/Causes.aspx

Other club foot leaflets download