

1: Clin Rehabil. 2006 Jan;20(1):12-23.

Comparison of effects of Cyriax physiotherapy, a supervised exercise programme and polarized polychromatic non-coherent light (Biopton light) for the treatment of lateral epicondylitis.

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OBJECTIVE: To compare the effectiveness of Cyriax physiotherapy, a supervised exercise programme, and polarized polychromatic non-coherent light (Biopton light) in the treatment of lateral epicondylitis. **DESIGN:** Controlled clinical trial. **SETTING:** Rheumatology and rehabilitation centre. **SUBJECTS:** This study was carried out with 75 patients who had lateral epicondylitis. They were allocated to three groups by sequential allocation. **INTERVENTIONS:** Group A (n = 25) was treated with Cyriax physiotherapy. A supervised exercise programme was given to group B (n = 25). Group C (n = 25) received polarized polychromatic non-coherent light (Biopton light). All patients received three treatments per week for four weeks. **OUTCOMES:** Pain was evaluated using a visual analogue scale and function using a visual analogue scale and pain-free grip strength at the end of the four-week course of treatment (week 4), one month (week 8), three months (week 16) and six months (week 28) after the end of treatment. **RESULTS:** The supervised exercise programme produced the largest effect in the reduction of pain and in the improvement of function at the end of the treatment ($P < 0.05$) and at any of the follow-up time points ($P < 0.05$). **CONCLUSION:** The supervised exercise programme should be the first treatment option for therapists when they manage lateral epicondylitis patients. If this is not possible, Cyriax physiotherapy and polarized polychromatic non-coherent light (Biopton light) may be suitable.

Publication Types:

Controlled Clinical Trial

PMID: 16502745 [PubMed - indexed for MEDLINE]

2: Physiother Res Int. 2005;10(2):59-71.

Factors associated with physiotherapists' confidence during assessment of clinical cervical and lumbar spine instability.

Cook C, Brismee JM, Sizer PS.

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BACKGROUND AND PURPOSE: Physiotherapists commonly encounter patients with complaints of vague, indistinguishable neck and back pain, such as clinical spine instability. Since confidence is a component of expert clinical practice, we were interested in measuring expert clinicians' confidence in diagnosing and assessing clinical spine instability. The aims of the present study were to factor out the common 'identifiers' associated with physiotherapists' objective, physical diagnosis and assessment of clinical spine instability, and to determine the association of reported diagnostic confidence to these identifiers. **METHOD:** The study used data from a Delphi instrument for the factor analysis and a survey of APTA Board-certified orthopaedic specialists for report of confidence. Using an ologit regression analysis, the identifier themes and clinical background characteristics were associated with confidence in diagnosis of clinical spine instability. **RESULTS:** Only clinical cervical spine instability obtained significant findings. The identifier 'observable or palpable abnormalities of motion during movement assessment in clinical practice' was positively associated with reported confidence in diagnosis, as was the influence of manual therapy background models: Cyriax, Maitland, McKenzie, NAIOMPT, Osteopathic, Paris and other. Male gender yielded negative association with reported confidence. No factors were associated with reported lumbar

confidence. CONCLUSIONS: Multiple backgrounds of physiotherapists demonstrate confidence in detecting clinical spine instability using observable or palpable methods to detect abnormal movements.

PMID: 16146324 [PubMed - indexed for MEDLINE]

3: Man Ther. 2005 Feb;10(1):61-7.

A descriptive study of the usage of spinal manipulative therapy techniques within a randomized clinical trial in acute low back pain.

Hurley DA, McDonough SM, Baxter GD, Dempster M, Moore AP.

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The majority of randomized clinical trials (RCTs) of spinal manipulative therapy have not adequately defined the terms 'mobilization' and 'manipulation', nor distinguished between these terms in reporting the trial interventions. The purpose of this study was to describe the spinal manipulative therapy techniques utilized within a RCT of manipulative therapy (MT; n = 80), interferential therapy (IFT; n = 80), and a combination of both (CT; n = 80) for people with acute low back pain (LBP). Spinal manipulative therapy was defined as any 'mobilization' (low velocity manual force without a thrust) or 'manipulation' (high velocity thrust) techniques of the spine described by Maitland and Cyriax. The 16 physiotherapists, all members of the Society of Orthopaedic Medicine, utilized three spinal manipulative therapy patterns in the RCT: Maitland Mobilization (40.4%, n = 59), Maitland Mobilization/Cyriax Manipulation (40.4%, n = 59) and Cyriax Manipulation (19.1%, n = 28). There was a significant difference between the MT and CT groups in their usage of spinal manipulative therapy techniques ($\chi^2 = 9.178$; $df = 2$; $P = 0.01$); subjects randomized to the CT group received three times more Cyriax Manipulation (29.2%, n = 21/72) than those randomized to the MT group (9.5%, n = 7/74; $df = 1$; $P = 0.003$). The use of mobilization techniques within the trial was comparable with their usage by the general population of physiotherapists in Britain and Ireland for LBP management. However, the usage of manipulation techniques was considerably higher than reported in physiotherapy surveys and may reflect the postgraduate training of trial therapists.

Publication Types:

Clinical Trial

Randomized Controlled Trial

PMID: 15681270 [PubMed - indexed for MEDLINE]

4: Br J Sports Med. 2004 Dec;38(6):675-7.

Cyriax physiotherapy for tennis elbow/lateral epicondylitis.

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Tennis elbow or lateral epicondylitis is one of the most common lesions of the arm with a well defined clinical presentation, which significantly impacts on the community. Many treatment approaches have been proposed to manage this condition. One is Cyriax physiotherapy. The effectiveness and reported effects of this intervention are reviewed.

Publication Types:

Review

PMID: 15562158 [PubMed - indexed for MEDLINE]

5: Swiss Med Wkly. 2004 Jun 12;134(23-24):353-8.

Comparison of the early response to two methods of rehabilitation in adhesive capsulitis.

Guler-Uysal F, Kozanoglu E.

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PRINCIPLE: A randomised, comparative prospective clinical trial was planned to compare the early response to different rehabilitation methods for adhesive capsulitis taking into consideration the clinical efficacy and the cost effectiveness of the methods. **METHODS:** Forty patients with adhesive capsulitis were randomised into two treatment groups. The first group (CYR) received the Cyriax approach of deep friction massage and mobilisation exercises three times weekly. The second group (PT) had daily physical therapy including hot pack and short wave diathermy application. Both groups concluded their treatments with stretching exercises and were also instructed to a daily home exercise program. The primary end point of the study was to reach 80% of the normal passive range of motion (ROM) of the shoulder in all planes within a period of two weeks. Secondary end points were the overall ROM and pain response (spontaneous pain, night pain and pain with motion) to each treatment. **RESULTS:** 19 patients in the CYR group (95%) and 13 patients in the PT group (65%) reached sufficient ROM at the end of the second week ($p < 0.05$). The improvement in shoulder flexion, inner and outer rotation values and the decrease in pain with motion were significantly better in the CYR group after the first week of treatment. **CONCLUSION:** The Cyriax method of rehabilitation provides a faster and better response than the conventional physical therapy methods in the early phase of treatment in adhesive capsulitis. The method is non-invasive, effective and requires fewer hospital visits for a sufficient early response.

Publication Types:

Clinical Trial

Randomized Controlled Trial

PMID: 15318285 [PubMed - indexed for MEDLINE]

6: MMW Fortschr Med. 2003 Sep 25;145(39):37-41.

[Leading symptom shoulder pain]

[Article in German]

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Pain in the shoulder should prompt a systematic clinical examination that adheres closely to the functional anatomy. The basic examination of the shoulder joint comprises active and passive movements and isometric resistance tests with the aid of which external and internal rotation and abduction/adduction can be investigated. The results of these tests provide the physician with a "pattern of findings" which unequivocally identifies the pain-triggering structure. Accordingly, shoulder pain can be classified into four categories as proposed by Cyriax. As treatment, intra-articular injections of corticoids or local anesthetics as determined by findings, where necessary supported by physiotherapeutic measures. Rupture of a tendon, in particular in the case of an active patient, is an indication for surgery.

PMID: 14649071 [PubMed - indexed for MEDLINE]

7: Tidsskr Nor Laegeforen. 1999 May 30;119(14):2059-63.

[Physiotherapy as manual therapy]

[Article in Norwegian]

Torstensen TA, Nielsen LL, Jensen R, Reginiussen T, Wiesener T, Kirkesola G, Mengshoel AM.

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Manual therapy includes methods where the therapist's hands are used to stretch, mobilize or manipulate the spinal column, paravertebral structures or extremity joints. The aims of these methods are to relieve pain and improve function. In Norway only specially qualified physiotherapists and chiropractors are authorized to perform manipulation of joints (high velocity thrust techniques). To become a qualified manual therapist in Norway one must have a minimum of two years of clinical practice as physiotherapist followed by two year full time postgraduate training in manual therapy (a total of six years). Historically the Norwegian manual therapy system was developed in the 1950s by physiotherapists and medical doctors in England (James Cyriax and James Mennell) and Norway. As a result doctors allowed physiotherapists to use manipulation as a treatment method of both spinal and peripheral joints. In 1957 the Norwegian health authorities introduced reimbursement for manual therapy performed by physiotherapists.

Publication Types:

Historical Article

Review

PMID: 10394284 [PubMed - indexed for MEDLINE]

8: Phys Ther. 1998 Jun;78(6):593-601.

Movement diagram and "end-feel" reliability when measuring passive lateral rotation of the shoulder in patients with shoulder pathology.

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BACKGROUND AND PURPOSE: Findings related to joint function can be recorded with movement diagrams or by characterizing the "end-feel" according to the procedure described by Cyriax. Because both methods are used to classify pain and resistance in relation to joint range of motion (ROM), the purpose of this study was to simultaneously evaluate the reliability of these categorizations in a patient sample. **SUBJECTS:** Two physical therapists performed 2 assessments of passive lateral rotation of the shoulder in 34 patients. **METHODS:** Pain and resistance findings were recorded using movement diagrams and end-feel categories. Intraclass correlation coefficients (ICC[2,1]) were used to analyze the ratio (movement diagram) data, and kappa statistics (kappa) were used to analyze the categorical (end-feel) data. **RESULTS:** Intrarater ICCs varied from .58 to .89. Interrater ICCs for locating maximum pain and resistance in joint ROM varied from .85 to .91. Other interrater ICCs were lower (ICC = .34-.88). Intrarater kappa values for end-feel were moderate (kappa = .48-.59), and interrater kappa values were substantial (kappa = .62-.76). **CONCLUSION AND DISCUSSION:** Movement diagram measures conceptually related to the end of joint ROM and end-feel were highly reliable. This finding and the fact that additional end-feel categories were introduced in the study may partially explain the end-feel reliability findings. Consideration of their use in future studies may help to determine their clinical utility.

PMID: 9626271 [PubMed - indexed for MEDLINE]

9: Med Hist. 1997 Oct;41(4):487-95.

Medical gymnastics and the Cyriax collection.

Bakewell S.

Wellcome Institute for the History of Medicine, London.

Publication Types:

Biography

Historical Article

Personal Name as Subject:

Cyriax EF

PMID: 9536620 [PubMed - indexed for MEDLINE]

10: Phys Ther. 1998 Jan;78(1):62-73.

Comment in:

Phys Ther. 1998 Apr;78(4):436-8.

Clinical reasoning in the evaluation and management of undiagnosed chronic hip pain in a young adult.

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This case report describes the clinical reasoning used to manage chronic left hip pain in a 21-year-old woman who was recreationally active. The patient had a history of possible congenital hip dysplasia (CHD) and known recurrent lateral (external) patellar subluxations on the left side. She complained of experiencing hip pain when walking, sitting, playing soccer, and doing "step aerobics." Hip range of motion (ROM), muscle force, and joint stability problems were assessed. Abnormal movement patterns were observed during gait and step aerobics. Intervention was based on the working hypothesis that periarticular stiffness and muscle weakness from earlier trauma were superimposed on joint instability from CHD. Following intervention, the patient's hip ROM and muscle force improved concurrently with reduction of hip pain, increased ability to participate in recreational activities, and improvement in the movement pattern during step aerobics. An eclectic approach to analysis of the problem was used, combining data unique to the patient with knowledge of CHD and concepts proposed by Cyriax, Maitland, Sahrmann, and others. The clinical reasoning used to establish a basis for treatment and its limitations are discussed.

Publication Types:

Case Reports

PMID: 9442197 [PubMed - indexed for MEDLINE]

11: Arch Phys Med Rehabil. 1997 Dec;78(12):1369-74.

Classification of shoulder complaints in general practice by means of cluster analysis.

Winters JC, Groenier KH, Sobel JS, Arendzen HH, Meyboom-de Jongh B.

Department of Family Practice, University of Groningen, The Netherlands.

OBJECTIVE: To determine if a classification of shoulder complaints in general practice can be made with a cluster analysis of variables of medical history and physical examination. METHOD: One hundred one patients with shoulder complaints were examined upon inclusion (week 0) and after 2 weeks. Eleven variables of the medical histories and 19 variables of the physical examinations were used for the analysis. RESULTS: The analyses of week 0 and week 2 reveal three stable clusters: one cluster with almost half of the patients who hardly had limitations in the range of scapulohumeral mobility (ROM), one cluster with a small number of patients with a short history of complaints and a limitation of scapulohumeral mobility in all directions (7 and 6, respectively), and a third cluster containing the rest of the patients, with 30% to 50% limitation in ROM. The degree of limitation in ROM decreased after 2 weeks. Comparison of the patients in the clusters of week 0 and week 2 revealed a shift of patients within the clusters, although the number of patients in the clusters remained almost constant. CONCLUSION: Only three stable clusters could be identified, which questions the suitability of more detailed classifications, such as described by Cyriax or the Dutch Guidelines for Shoulder Complaints, for the diagnosis of patients with shoulder complaints in general practice.

PMID: 9421993 [PubMed - indexed for MEDLINE]

12: J Orthop Sports Phys Ther. 1996 Sep;24(3):122-9.

Assessment of exercise-induced minor muscle lesions: the accuracy of Cyriax's diagnosis by selective tension paradigm.

Franklin ME, Conner-Kerr T, Chamness M, Chenier TC, Kelly RR, Hodge T.

Physical Therapy Program, East Carolina University, Greenville, NC 27858-4353, USA.

The Cyriax selective tension assessment paradigm is commonly used by clinicians for the diagnosis of soft tissue lesions; however, studies have not demonstrated that it is a valid method. The purpose of this study was to examine the construct validity of the active motion, passive motion, resisted movement, and palpation components of the Cyriax selective tension diagnosis paradigm in subjects with an exercise-induced minor hamstring muscle lesion. Nine female subjects with a mean age of 23.6 years (SD = 4.7) and a mass of 57.3 kg (SD = 10.7) performed two sets of 20 maximal eccentric isokinetic knee flexor contractions designed to induce a minor muscle lesion of the hamstrings. Active range of motion, passive range of motion, knee extension end-feel pain relative to resistance sequence, knee flexor isometric strength, pain perception during knee flexor resisted movement testing, and palpation pain of the hamstrings were assessed at 0, 5, 2, 12, 24, 48, and 72 hours postexercise and compared with Cyriax's hypothesized selective tension paradigm results. Consistent with Cyriax's paradigm, passive range of motion remained unchanged, and perceived pain of the hamstrings increased with resistance testing at 12, 24, 48, and 72 hours postexercise when compared with baseline. In addition, palpation pain of the hamstrings was significantly elevated at 48 and 72 hours after exercise ($p < 0.05$). In contrast of Cyriax's paradigm, active range of motion was significantly reduced over time ($p < 0.05$), with the least amount of motion compared to baseline (85%) occurring at 48 hours postexercise. Further, resisted movement testing found significant knee flexor isometric strength reductions over time ($p < 0.05$), with the greatest reductions (33%) occurring at 48 hours postexercise. According to Cyriax, when a minor muscle lesion is tested, it should be strong and painful; however, none of the postexercise time frames exhibited results that were strong and painful. This study suggests that the validity of using Cyriax's selective tension testing for the diagnosis of exercise-induced minor muscle lesions is questionable.

PMID: 8866270 [PubMed - indexed for MEDLINE]

13: Presse Med. 1996 Jun 15;25(21):973-6.

[Painful rib syndrome (or Cyriax syndrome). Study of 100 patients]

[Article in French]

Barki J, Blanc P, Michel J, Pageaux GP, Hachemane-Aourag S, Carabalona JP, Larrey D, Michel H.

Service d'Hepato-Gastroenterologie, Hopital Saint-Eloi, Montpellier.

OBJECTIVE: To analyse clinical expression and outcome of painful rib syndrome in a large series of 100 cases. METHODS: From 1978 to 1993, 100 consecutive patients with chronic anterior chest pain or supramesocolic abdominal pain of unknown origin underwent complete physical examination, laboratory tests and complementary explorations as required. RESULTS: Among the first 100 patients the sex ratio was 3.34 and mean age 50.6 years (21-80). Chronic pain had persisted for an average 41.2 months (15 days-30 years), predominantly on the right (81%) and exceptionally bilaterally (1%). No evidence of a cause could be identified from laboratory tests or complementary explorations. A past history of direct trauma was found in 71 patients and indirect trauma in 21. Seventy-three patients were given 1% lidocaine infiltrations (20 to 40 ml) including 14 who received 2 or 3 infiltrations. Six patients underwent surgical resection of a luxated cartilage with curative effect in 5. CONCLUSION: The diagnosis of painful rib syndrome is based solely on the presence of pain upon applying pressure to the anteroinferior border of the rib cage and is related to often neglected or forgotten trauma.

PMID: 8692774 [PubMed - indexed for MEDLINE]

14: J Bone Joint Surg Br. 1996 Jan;78(1):128-32.

Local corticosteroid injection versus Cyriax-type physiotherapy for tennis elbow.

Verhaar JA, Walenkamp GH, van Mameren H, Kester AD, van der Linden AJ.

University Hospital, Maastricht, The Netherlands.

We performed a prospective, randomised trial on 106 patients to compare the effects of local corticosteroid injections with physiotherapy as advocated by Cyriax in the treatment of tennis elbow. The main outcome measures were the severity of pain, pain provoked by resisted dorsiflexion of the wrist, and patient satisfaction. At six weeks 22 of 53 patients in the injection group were free from pain compared with only three in the physiotherapy group. In the corticosteroid-treated group 26 patients had no pain on resisted dorsiflexion of the wrist compared with only three in the physiotherapy group. Thirty-five patients who had injections and 14 who had physiotherapy were satisfied with the outcome of treatment at six weeks. At the final assessment there were 18 excellent and 18 good results in the corticosteroid group and one excellent and 12 good results in the physiotherapy group. There was a significant increase in grip strength in both groups but those with injections had a significantly better result. After one year there were no significant differences between the two groups. Half of the patients, however, had received only the initial treatment, 20% had had combined therapy and 30% had had surgery. We conclude that at six weeks, treatment with corticosteroid injections was more effective than Cyriax physiotherapy and we recommend it because of its rapid action, reduction of pain and absence of side-effects.

Publication Types:

Clinical Trial

Randomized Controlled Trial

PMID: 8898143 [PubMed - indexed for MEDLINE]

15: J Orthop Sports Phys Ther. 1996 Jan;23(1):34-8.

Intertester reliability of the Cyriax evaluation in assessing patients with shoulder pain.

Pellecchia GL, Paolino J, Connell J.

University of Hartford, Physical Therapy Program, CT 06117, USA.

James Cyriax's approach to diagnosis and treatment of soft tissue disorders is frequently used by orthopaedic and sport physical therapists. The reliability of using Cyriax's system to determine diagnostic categories, however, has not been established. The purpose of this study was to examine the intertherapist reliability of assessments made using Cyriax's shoulder evaluation. Twenty-one cases of painful shoulder were evaluated independently by two experienced physical therapists. Therapists used a checklist to indicate their assessment of each case by selecting a specific shoulder lesion or by indicating that the case did not fit the Cyriax model. Cohen's kappa statistic was used to measure intertherapist agreement. Therapists classified 19 of the 21 cases into the same diagnostic category for a percent agreement of 90.5%. The kappa value was .875, indicating "almost perfect" agreement. Both therapists classified the same four cases of painful shoulder as not fitting the Cyriax model of soft tissue examination. The results of this study show that the Cyriax evaluation can be a highly reliable schema for assessing patients with shoulder pain.

PMID: 8749748 [PubMed - indexed for MEDLINE]

16: Phys Ther. 1994 Nov;74(11):1073-5.

Comment on:

Phys Ther. 1994 Aug;74(8):697-707; discussion 707-9.

Cyriax reexamined.

Bowling RW, Erhard RE.

Publication Types:

Comment
Letter

PMID: 7818716 [PubMed - indexed for MEDLINE]

17: Int Orthop. 1994 Oct;18(5):263-7.

Tennis elbow. Anatomical, epidemiological and therapeutic aspects.

Verhaar JA.

Department of Orthopaedics, University Hospital Maastricht, The Netherlands.

Five studies of tennis elbow are presented. Epidemiological studies showed an incidence of tennis elbow between 1 and 2%. The prevalence of tennis elbow in women between 40 and 50 years of age was 10%. Half of the patients with tennis elbow seek medical attention. Local corticosteroid injections were superior to the physiotherapy regime of Cyriax. Release of the common forearm extensor origin resulted in 70% excellent or good results one year after operation and 89% at five years. Anatomical investigations and nerve conduction studies of the Radial Tunnel Syndrome supported the hypothesis that the Lateral Cubital Force Transmission System is involved in the pathogenesis of tennis elbow.

Publication Types:

Case Reports
Review

PMID: 7852001 [PubMed - indexed for MEDLINE]

18: Phys Ther. 1994 Aug;74(8):697-707; discussion 707-9.

Comment in:

Phys Ther. 1994 Nov;74(11):1073-5.

Phys Ther. 1995 Mar;75(3):239-40.

An examination of Cyriax's passive motion tests with patients having osteoarthritis of the knee.

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Programs in Physical Therapy, Northwestern University Medical School, Chicago, IL 60611.

BACKGROUND AND PURPOSE. We explored the construct validity and test-retest reliability of the passive motion component of the Cyriax soft tissue diagnosis system. We compared the hypothesized and actual patterns of restriction, end-feel, and pain/resistance sequence (P/RS) of 79 subjects with osteoarthritis (OA) of the knee and examined associations among these indicators of dysfunction and related constructs of joint motion, pain intensity, and chronicity.

SUBJECTS. Subjects had a mean age of 68.5 years (SD = 13.3, range = 28-95), knee stiffness for an average of 83.6 months (SD = 122.4, range = 1-612), knee pain averaging 5.6 cm (SD = 3.1, range = 0-10) on a 10-cm visual analogue scale, and at least a 10-degree limitation in passive range of motion (ROM) of the knee.

METHODS. Passive ROM (goniometry, n = 79), end-feel (n = 79), and P/RS during end-feel testing (n = 62) were assessed for extension and flexion on three occasions by one of four experienced physical therapists. Test-retest reliability was estimated for the 2-month period between the last two occasions.

RESULTS. Consistent with hypotheses based on Cyriax's assertions about patients with OA, most subjects had capsular end-feels for extension; subjects with tissue approximation end-feels for flexion had more flexion ROM than did subjects with capsular end-feels, and the P/RS was significantly correlated with pain intensity ($\rho = .35$, extension; $\rho = .30$, flexion). Contrary to hypotheses based on Cyriax's assertions, most subjects had noncapsular patterns, tissue approximation end-feels for flexion, and what Cyriax called pain synchronous with resistance for both motions. Pain intensity did not differ depending on end-feel. The P/RS was not correlated with chronicity ($\rho = .03$, extension; $\rho = .01$, flexion). Reliability, as analyzed by intraclass correlation coefficients (ICC[3,1]) and Cohen's kappa coefficients, was acceptable ($>$ or $= .80$) or nearly acceptable for ROM (ICC = .71-.86, extension; ICC = .95-.99, flexion) but not for end-feel (kappa = .17, extension; kappa = .48, flexion) and P/RS (kappa = .36, extension; kappa = .34, flexion).

CONCLUSION AND DISCUSSION. The use of a quantitative definition of the capsular pattern, end-feels, and P/RS as indicators of knee OA should be reexamined. The validity of the P/RS as representing chronicity and the reliability of end-feel and the P/RS are questionable. More study of the soft tissue diagnosis system is indicated.

PMID: 8047559 [PubMed - indexed for MEDLINE]

19: Phys Ther. 1982 Aug;62(8):1144-7.

Evaluation and treatment of soft tissue lesions of the ankle and forefoot using the Cyriax approach: a case report.

Woodman RM, Pare L.

Publication Types:

Case Reports

PMID: 7100271 [PubMed - indexed for MEDLINE]

20: Br Med J. 1980 Jan 12;280(6207):111.

Manipulation trials.

Cyriax J.

Publication Types:
Letter

PMID: 6444362 [PubMed - indexed for MEDLINE]

21: Phys Ther. 1979 Mar;59(3):259-67.

Orthopedic manual therapy--an overview. Part II: the spine.

Cookson JC.

The focus of this article is orthopedic manual therapy for the spine: 1) precautions and contraindications for manual methods of treatment; 2) definitions of general terms for therapeutic techniques of mobilization and traction; and 3) the general concepts and the evaluation, treatment, and aftertreatment procedures of James Cyriax, MD, MRCP; Freddy Kaltenborn, DO, RPT; Geoffrey Maitland, MAPA, FCSP; and John McM. Mennell, MD.

PMID: 419170 [PubMed - indexed for MEDLINE]

22: Phys Ther. 1979 Feb;59(2):136-46.

Orthopedic manual therapy--an overview. Part I: the extremities.

Cookson JC, Kent BE.

Part 1 of an introductory overview of orthopedic manual therapy is presented, covering evaluation and treatment of the extremities. The first section defines introductory concepts about passive movement, including types of movement, limitations of movement, and types of treatment movements. The remaining four sections cover general concepts, evaluation schemes, and treatment procedures of four practitioners belonging to different schools of thought in orthopedic manual therapy: James Cyriax, MD, MRCP; Freddy Kaltenborn, DO, RPT; Geoffrey Maitland, MAPA, FCSP; and John McM Mennell, MD. The conclusion stresses the importance of developing skills in evaluation, as well as treatment, prior to practicing orthopedic manual therapy.

PMID: 760122 [PubMed - indexed for MEDLINE]

23: Lancet. 1978 Apr 29;1(8070):919-21.

Dural pain.

Cyriax J.

PMID: 76856 [PubMed - indexed for MEDLINE]

24: Naturwissenschaften. 1978 Feb;65(2):106-8.

The conformation of double-stranded DNA.

Cyriax B, Gath R.

PMID: 634375 [PubMed - indexed for MEDLINE]

25: Br Med J. 1977 Jun 11;1(6075):1353.

Clinical rheumatology and orthopaedic medicine.

Cyriax J.

Publication Types:

Letter

PMID: 301416 [PubMed - indexed for MEDLINE]

26: Physiotherapy. 1977 Feb;63(2):60-1.

Deep massage.

Cyriax J.

PMID: 840919 [PubMed - indexed for MEDLINE]

27: Br Med J. 1976 Feb 28;1(6008):522-3.

Letter: Trial by traction.

Cyriax J.

PMID: 130182 [PubMed - indexed for MEDLINE]

28: Br Med J. 1975 Jul 26;3(5977):231.

Letter: "Orthopaedic beds".

Cyriax J.

PMID: 1148753 [PubMed - indexed for MEDLINE]

29: Can Med Assoc J. 1974 Nov 2;111(9):911, 913.

Letter: Chiropractic.

Cyriax J.

PMID: 4419863 [PubMed - indexed for MEDLINE]

30: Med J Aust. 1973 Jun 9;1(23):1165.

Registration of chiropractors.

Cyriax J.

PMID: 4725454 [PubMed - indexed for MEDLINE]

31: Can Med Assoc J. 1972 Sep 23;107(6):485.

Spinal manipulation and chiropractic.

Cyriax J.

PMID: 5056998 [PubMed - indexed for MEDLINE]

32: Br Med J. 1972 Aug 5;3(822):353.

Physical medicine--a misnomer?

Cyriax J.

PMID: 4537954 [PubMed - indexed for MEDLINE]

33: Nurs Mirror Midwives J. 1972 Feb 25;134(7):24-7.

Manipulation--doctor, layman or physiotherapist?

Cyriax JH.

PMID: 4481320 [PubMed - indexed for MEDLINE]

34: Br Med J. 1971 Oct 16;4(780):173.

Non-specific backache.

Cyriax J.

PMID: 4255858 [PubMed - indexed for MEDLINE]

35: Physiotherapy. 1971 May;57(5):203-6.

The knee.

Cyriax J.

PMID: 5087441 [PubMed - indexed for MEDLINE]

36: Physiotherapy. 1970 Jan 10;56(1):2-6.

Examination of the spinal column.

Cyriax J.

PMID: 4244511 [PubMed - indexed for MEDLINE]

37: Dist Nurs. 1969 Nov;12(8):154-5 passim.

Posture and pain.

Cyriax J.

PMID: 4243279 [PubMed - indexed for MEDLINE]

38: Br Med J. 1969 Oct 18;4(676):173.

Manipulation for lumbar disc prolapse.

Cyriax J.

PMID: 4241837 [PubMed - indexed for MEDLINE]

39: Acta Chir Orthop Traumatol Cech. 1968 Oct;35(5):388-92.

[Lesions of the lumbar disk--conservative treatment]

[Article in Czech]

Cyriax JH.

PMID: 5705727 [PubMed - indexed for MEDLINE]

40: Br J Clin Pract. 1965 Oct;19(10):593-6.

Sciatica.

Cyriax JH.

PMID: 5830348 [PubMed - indexed for MEDLINE]

41: Curr Med Drugs. 1965 Mar;38:3-16.

MANIPULATIVE TREATMENT.

CYRIAX J.

PMID: 14263230 [PubMed - OLDMEDLINE for Pre1966]

42: Physiotherapy. 1964 Sep;50:300-3.

CONSERVATIVE TREATMENT OF LUMBAR DISC LESIONS.

CYRIAX J.

PMID: 14206579 [PubMed - OLDMEDLINE for Pre1966]

43: Lancet. 1964 Mar 14;13:571-3.

THE PROS AND CONS OF MANIPULATION.

CYRIAX J.

PMID: 14104481 [PubMed - OLDMEDLINE for Pre1966]

44: Nurs Times. 1963 Sep 6;59:1117-9.

INSTITUTIONAL NEUROSIS.

CYRIAX V.

PMID: 14049097 [PubMed - OLDMEDLINE for Pre1966]

45: Nurs Times. 1963 Sep 6;59:1114-6.

NURSES AND THEIR HEALTH.

CYRIAX V.

PMID: 14049096 [PubMed - OLDMEDLINE for Pre1966]

46: Dtsch Med Wochenschr. 1962 Feb 9;87:299-304.

[Conservative treatment of lumbar intervertebral disk prolapse according to the Cyriax method.]

[Article in German]

HIRSCHFELD PF.

PMID: 13907732 [PubMed - OLDMEDLINE for Pre1966]

47: Acta Orthop Belg. 1961 Jul-Aug;27:442-56.

[Lumbar diskal lesions.]

[Article in French]

CYRIAX JH.

PMID: 13882853 [PubMed - OLDMEDLINE for Pre1966]

48: S Afr Med J. 1958 Jan 18;32(3):62-8.

Diagnosis at the shoulder.

CYRIAX J.

PMID: 13506745 [PubMed - OLDMEDLINE for Pre1966]

49: S Afr Med J. 1958 Jan 4;32(1):1-3.

Lumbar disc lesions; conservative treatment.

CYRIAX J.

PMID: 13506735 [PubMed - OLDMEDLINE for Pre1966]

50: Med World. 1956 Jun;84(6):486-9.

The injured athlete.

CYRIAX J.

PMID: 13333461 [PubMed - OLDMEDLINE for Pre1966]

51: Proc R Soc Med. 1955 Oct;48(10):805-14.

Discussion on the treatment of backache by traction.

CRISP EJ, CYRIAX JH, CHRISTIE BG.

PMID: 13266831 [PubMed - OLDMEDLINE for Pre1966]

52: Br Med J. 1955 Jan 15;4906:140-2.

Spinal disk lesions; an assessment after twenty-one years.

CYRIAX J.

PMID: 13219362 [PubMed - OLDMEDLINE for Pre1966]

53: Br Med J. 1953 Oct 31;4843:966-8.

Hydrocortone and soft-tissue lesions.

CYRIAX J, TROISIER O.

PMID: 13094084 [PubMed - OLDMEDLINE for Pre1966]

54: Br Med J. 1953 May 16;1(4819):1077-81.

Pain in the trunk.

GOULD J, CYRIAX J.

PMID: 13042139 [PubMed - OLDMEDLINE for Pre1966]

55: Postgrad Med J. 1953 Jan;29(327):4-10.

The treatment of lumbar disc-lesions.

CYRIAX J.

PMID: 13026595 [PubMed - OLDMEDLINE for Pre1966]

56: Med Tech (Stuttg). 1952 Apr 12;15:485-90.

[Diseases of cervical intervertebral discs.]

[Article in Undetermined Language]

CYRIAX J.

PMID: 14956467 [PubMed - OLDMEDLINE for Pre1966]

57: Physiotherapy. 1952 Jan;38(1):3-8.

The advantages of accurate treatment.

CYRIAX J.

PMID: 14900049 [PubMed - OLDMEDLINE for Pre1966]

58: Med Illus. 1951 Jul;5(7):321-7.

Manipulation and the physiotherapist.

CYRIAX J.

PMID: 14852395 [PubMed - OLDMEDLINE for Pre1966]

59: Med Hyg (Geneve). 1951 Feb 3;9(187 Spec. No.):55-6.

[Fibrositis.]

[Article in Undetermined Language]

CYRIAX J.

PMID: 14805481 [PubMed - OLDMEDLINE for Pre1966]

60: Br Med J. 1950 Dec 23;4694:1434-8.

The treatment of lumbar disk lesions.

CYRIAX J.

PMID: 14792049 [PubMed - OLDMEDLINE for Pre1966]