Replacement of the fractured radial head – a case study

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Introduction.– Fractures of the radial head may be isolated or associated with more complex injuries such as fractures and dislocations around the elbow and rupture of the distal radioulnar joint. As the severity of the injury increases, the controversial question of prosthetic replacement arises.

Observation.– We present a case report of a Mason IV radial head fracture, associated with posterior luxation of the elbow and fracture of the coronoid process in a 65-year-old female, submitted to a radial head replacement with a metallic prosthesis and a reconstruction of the coronoid process, followed by a rehabilitation program.

Discussion.– There is no consensus about the treatment of an unstable elbow injury associated with fracture of the radial head. The options include excision, reconstruction and replacement.

The replacement of the radial head seems to be a good treatment for Mason type IV fracture associated with fractures of the proximal ulna or elbow dislocation.

Further reading

References

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P109-e

Total ankle replacement: Clinical and functional assessment by AFCP score at 8 weeks postoperative

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Keywords: Total ankle replacement; Ankle arthritis

Background.– The management of disabling arthritis of the ankle is a challenge. There is a resurgence of interest in total ankle replacement (TAR). Unlike arthrodesis it aims to restore mobility, stability, indolence, preserving the adjacent joints. The objective of this work is to evaluate the overall functional outcome after TAR.

Methods.– Cases serie, from 15th November to 15 May 2013, Rehabilitation Center “Le Castelet” Saint-Jean-de-Vedas, France. Primary purpose: after 8 weeks postoperative the functional score AFCP was evaluated.

Results.– Eighteen included (n = 18). Median age 59.5 y.o, 13 men, 5 women. BMI 25. Etiology: post-traumatic 50%, laxity 22%. Associated procedures 44%, (4 Achilles lengthening, 3 lateral ligament reconstructions, 3 osteotomies). Main outcome: 18.5 point (36%) improvement in the AFCP score was noted.

Discussion.– Functional improvement 8 weeks postoperative, age and sex have no influence on the results. Overweight is a jeoparatic factor. AFCP et al. (2006) reported a score of 82/100 at an average follow-up of 3 years. Easley systematic review in 2011 reported 90% implants survival rate at an average of 10 years, with an acceptable complication and revision rate.

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Efficacy of a platelet-rich plasma treatment in subjects with plantar fasciitis

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Keywords: Plantar fasciitis (fasciosis); PRP; Ultrasonography; Clinical outcomes.

Introduction.– To determine the effect of a platelet-rich plasma (PRP) treatment applied in patients with plantar fasciosis through clinical and quantitative ultrasound measurement, conducted after treatment intervention and during a follow-up period.

Methods.– A prospective observational study was conducted in patients diagnosed of PF, treated with PRP ultrasonography guided injection, with a 2-week, 4-week and 3-month follow-up. Eighteen patients with clinical diagnosis of plantar fasciosis who met inclusion criteria.

Results.– A decrease of 1.64 ± 1.01 mm (P-value = 0.000) in the plantar fascia sagittal thickness was quantified at 2-weeks follow-up, a decrease of 2.01 ± 1.10 mm (P-value = 0.000) was quantified at 4-weeks, and a decrease of 2.20 ± 1.02 mm (P-value = 0.000) was quantified a 3-months follow-up. All plantar fascia mean reductions were over the Limits of Agreement for plantar fascia ultrasonography for repeated measures. Pain at first steps in the morning was reduced in 4.02 ± 1.94 mm at 2-weeks (P-value = 0.000), 6 ± 2.54 mm at 4-weeks (P-value = 0.000) and 7.13 ± 2.37 mm at 3-months (P-value = 0.000) follow-up. Pain on return to weight-bearing following rest was reduced in 3.66 ± 2.32 mm at 2-weeks (P-value = 0.000), 4.94 ± 2.09 mm at 4-weeks (P-value = 0.000) and 6.30 ± 2.34 mm at 3-months (P-value = 0.000) follow-up.

Conclusion.– Preliminary results suggest that PRP is a safe and effective therapeutic approach to reduce plantar fascia sagittal thickness following the I.O.A. for repeated measurements in patients with PF, correlated with an improvement of pain.

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Significance of laser therapy and laser acupuncture in epicondylitis treatment

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Keywords: Epicondilitis; Laser therapy; Laser acupuncture

Introduction.– Epicondylitis is an inflammation of the attachment (enthesitis) muscles of the forearm to the outer or inner epicondyle of the humerus.

Object.– The purpose of the study is to compare therapy with laser application on painful areas of the affected ankles with laser application on acupuntural points on pain relief and ankle flexion amplitude in patients with epicondylitis.
Methods. -- Twenty-two patients are included and followed during epicondylitis treatment. The chosen patients, beside epicondylitis had a functional deficit with movement limitations of flexion. First group (12 patients) was treated with laser beam applied on painful areas. Ten patients in second group were treated with laser applied on acupuntural point SI5, Li4, Li10, L11, Pc3, Si8. Results. -- Analysing the VAS scale data it was estimated that high statistical significance in both groups is \( P<0.001 \). While measuring ankle movement high statistical significance is achieved also in improvement of ankle flexion amplitude in both groups (Kruskal-Wallis test, \( P<0.001 \)). Better pain relief and increased flexion was detected also in group II laser acupuncture application (Mann-Whitney \( P<0.05 \)).

Conclusion. -- Analysis has clearly shown positive impact of laser therapy in pain relief, and ankle movement amplitude, with better results of laser applications on acupuntural points during treatment.

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P113-e

Effect of kinesiotaping in patients with chronic lumbar disc herniation: Randomized-controlled, double-blind study

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Keywords: Chronic low back pain; Kinesiotaping; Oswestry Disability Index; Health Assessment Questionnair

Introduction. -- We aimed to investigate the effects of KinesioTape (KT) on patients with chronic low back pain due to lumbar disc herniation.

Material and methods. -- Patients with low back pain more than 3 months diagnosed as lumbar disc herniation, aged between 25–45-years-old were randomized to the KT (n=32) or sham taping (n=28) group. All the patients were prescribed home exercises for lumbar disc herniation; taping was done 3 times, once a week either with KT or sham tape. Patients were evaluated at the beginning, 3rd, 6th and 12th weeks by a blinded physiatrist. Visual Analog Scale (VAS), Health Assessment Questionnair (HAQ), Oswestry Disability index (ODI) and number of paracetamol tablets taken were used for evaluation.

Results. -- Mean age was 37.3 ± 6.6 years. The demographic and clinical features of the two groups were similar at the beginning. There was significant improvement at all the parameters at the 3rd week in both groups; but the improvement continued to 12th week (HAQ and VAS) in the taping group only. The patients in the sham group needed more analgesic after 3rd week.

Discussion. -- Kinesiotaping is effective in increasing function, decreasing pain, need for analgesic medication in patients with chronic lumbar disc herniation.

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Lumbar disc prosthesis and physical and sports activities: A monocentric study with 83 patients

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Keywords: Lumbar disc prosthesis; Physical and sports activities; Chronic lumbargia

Introduction. -- Surgical treatment by disc prosthesis of chronic lumbargia for disc insufficiency is an alternative to the treatment by arthrodesis, particularly in physically active patients, eager to continue exercising their practice. In terms of efficacy on pain, both treatments have similar results; however, the treatment by prosthesis enables preserving the mobility of the operated spinal segment.

Objective. -- To evaluate the impact of physical and sports activities on the evolution in terms of pain, quality of life and delay before resuming work.

Methods. -- Eighty-three patients who had disc prosthesis surgery for lumbar disc degeneration between 2003 and 2008. The 83 patients with disc prosthesis surgery were distributed into three groups, according to their level of physical and sport activity: intensive physical and sport activity, regular physical and sports activity, and settled way of life.

Results. -- After a mean follow-up of 36 months, the results in terms of pain, quality of life and delay before resuming work are all better for subjects with intensive physical and sport activity, highlighting the beneficial role of physical and sports activity, on the effects of a surgical treatment by lumbar disc prosthesis.

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Clinical effects of different therapeutic models in tendinitis supraspinatus

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Keywords: Tendinitis supraspinatus; Laserotherapy; Corticosteroid infiltration; Acupuncture

Clinical effects of different therapies in tendinitis supraspinatus. Leading pathological cause is tendon inflammation followed by hypertervascularisation and oedema. Main clinical manifestations are pain and impaired function.

Objectives. -- To establish therapeutic effects of three different therapeutic models: low level lasertherapy (LLT), local corticosteroid infiltration (LCI) and acupuncture (A), on subjective symptoms and objective signs, in painful shoulder syndrome caused by tendinitis supraspinatus. To compare effects of the three different therapeutic models.

Methods. -- Randomised prospective clinical study included 36 patients with chronic shoulder pain, comparable with regard to sex, age, concomitant diseases. Diagnosis was made with regard to clinical, radiological, ultrasonographic examination. Patients were divided in three therapeutic groups (12 patients).

I-group: treated with laserotherapy. Midlaser, Irradia, 904 nm, 5000 Hz. Ten points located in inflammatory region, daily dose of 10 J/cm² X days. II-group: treated with LCI/Betamethasonium Diprosos® 1 mL/in inflammatory region. III-group: treated with acupuncture(LI4,G38,UB57,LI11,LI15,LI16, 4 pain-tender-points), NoX. All of the patients were given pendular free-swinging exercises. Measured parameters were: local functional status-measured with Constant Murley functional scale. Wilcoxon test and Kruskall-Wallis test was used for statistical analysis.

Results. -- Highly significant statistical difference was fortified before and after the treatment in every of the three therapeutic groups (Wilcoxon, \( P<0.001 \)). There was no significant difference among therapeutic groups (Kruskall-Wallis, \( P<0.05 \)).

Conclusion. -- In patients with tendinitis supraspinatus, laserotherapy, Diprosos® and acupuncture are highly effective for functional status improving.

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P116-e

Effects of lumbar orthosis on postural control strategies in subacute low back pain

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Some low back pain (LBP) patients demonstrate a rigid postural control strategy induced by a persistent and excessive muscular co-activation of the trunk. The aim of this study was to measure the effect of different lumbar orthosis (LO) designs for preventing the occurrence of this fear-avoidance strategy. Twelve