

1. ANATOMIA: **Articolazione del ginocchio.**
2. FISIOTERAPIA: **Generatori di onde d'urto: differenze in modalità di applicazione.**
3. STATUTO: **Il Senato Accademico: compiti e funzioni.**
4. INFORMATICA: **Il candidato, dopo avere brevemente illustrato i principali usi di excel, spieghi cosa è una formula in excel e faccia degli esempi di utilizzo.**
5. INGLESE: **Role of shortwave and microwave diathermy in peripheral neuropathy .**

Abstract: **Objective:** This study was performed to review the current evidence for the efficacy of shortwave and microwave diathermy in promoting nerve regeneration after peripheral nerve injuries in both animal models and human patients. **Methods:** An extensive literature search was conducted without publication data restrictions. Studies including the intervention and outcome in animal or human models were selected. Non-English studies, reviews, letters, and case reports were excluded. **Results:** Eleven articles were included in this study. Shortwave diathermy at the frequency of 27.12 or 40.68 MHz was used in six of seven animal studies, while only one study utilized microwave diathermy at 915 MHz. Seven animal experiments demonstrated that shortwave or microwave diathermy produces an increased myelinated nerve fiber number, myelin sheath thickness, and axon diameter as well as improved electrophysiological parameters and locomotion. A total of 128 patients (207 wrists) were enrolled in four clinical studies. The clinical use of diathermy in human patients with carpal tunnel syndrome showed positive effects on pain, hand function, and electrophysiological findings. **Conclusions:** Shortwave or microwave diathermy can improve the electrophysiological parameters, myelinated fiber number, and axon diameter of the injured nerve.

1. ANATOMIA: **Scheletro del piede.**
2. FISIOTERAPIA: **Facilitazione Neuromuscolare Propriocettiva: indicazioni e modalità di applicazione.**
3. STATUTO: **Il rettore: compiti e funzioni.**
4. INFORMATICA: **Principali usi di Word e azioni per la stampa di un documento.**
5. INGLESE: **Extracorporeal Shock Wave Therapy for Achilles Tendinopathy**

Abstract: Extracorporeal shock wave therapy (ESWT) is among the conservative treatments for Achilles tendinopathy. Unfortunately, no optimal application parameters have been determined that would ensure ESWT effectiveness in this condition. The aim of the paper is to use research reports on ESWT in patients with Achilles tendinopathy to help practising physiotherapists establish the most effective intervention parameters. A search was conducted using the following databases: PubMed, Scopus, EBSCOhost, and Web of Science. The papers were checked for relevant content and were included based on the following criteria: full-text article published in English and including comprehensive description of shock wave application. Twenty-two articles met the inclusion criteria. Most studies on the effectiveness of ESWT for Achilles tendinopathy included in this narrative review were randomized controlled trials. Two case-control studies, a case series study, prospective audit, clinical trial protocol, and a pilot study were also considered. The majority were prospective studies. Only a few authors presented the findings from retrospective observations. The two modalities of shock wave therapy used for Achilles tendinopathy are focused shock waves and radial shock waves. The literature contains reports presenting mainly beneficial effects of ESWT in patients with Achilles tendinopathy.

1. ANATOMIA: **Anatomia della colonna vertebrale.**
2. FISIOTERAPIA: **Principi e applicazioni della Diatermia.**
3. STATUTO: **Il candidato esponga le attività istituzionali dell'Università.**
4. INFORMATICA: **Il candidato, dopo avere brevemente spiegato i principali usi di Word, esponga quali sono le azioni da eseguire per inserire una tabella con due righe e tre colonne.**
5. INGLESE: **Aquatic therapy: scientific foundations and clinical rehabilitation applications**

Abstract: The aquatic environment has broad rehabilitative potential, extending from the treatment of acute injuries through health maintenance in the face of chronic diseases, yet it remains an underused modality. There is an extensive research base supporting aquatic therapy, both within the basic science literature and clinical literature. This article describes the many physiologic changes that occur during immersion as applied to a range of common rehabilitative issues and problems. Because of its wide margin of therapeutic safety and clinical adaptability, aquatic therapy is a very useful tool in the rehabilitative toolbox. Through a better understanding of the applied physiology, the practitioner may structure appropriate therapeutic programs for a diverse patient population.

1. ANATOMIA: **Innervazione dell'arto inferiore.**
2. FISIOTERAPIA: **Principi e applicazioni della Laserterapia.**
3. STATUTO: **Il Consiglio di Amministrazione: compiti e funzioni.**
4. INFORMATICA: **Il candidato, dopo avere brevemente spiegato i principali usi di Word, esponga come si sceglie una stampante diversa da quella predefinita e come è possibile cancellare la coda di stampa.**
5. INGLESE: **Role of Kabat rehabilitation in facial nerve palsy: a randomised study on severe cases of Bell's palsy**

Abstract: The treatment of Bell's palsy (BP), based on steroids and/or antiviral drugs, may still leave a certain percentage of affected subjects with disfiguring sequelae due to incomplete recovery. The different procedures of physical rehabilitation have not been demonstrated to play a favourable role in this disorder. The aim of the present study was to compare functional outcomes in severe cases of Bell's palsy when treated by steroids alone or by steroids accompanied by Kabat physical rehabilitation. This prospective study included 94 subjects who showed sudden facial nerve (FN) palsy with House-Brackmann grade IV or V and who were divided into two groups on the basis of the therapeutic approach: one group (a) was treated by steroids, and the other (b) received steroids in combination with physical rehabilitation. Medical treatment consisted in administration of steroids at a dosage of 60 mg per day for 15 days; physical rehabilitative treatment consisted in proprioceptive neuromuscular facilitation according to Kabat, and was administered to one of the two groups of subjects. Recovery rate, degree of recovery and time for recovery were compared between the two groups using the Mann-Whitney and univariate logistic regression statistical tests (Ward test). Kabat patients (group b) had about 20 times the odds of improving by three HB grades or more (OR = 17.73, 95% CI = 5.72 to 54.98, $p < 0.001$) than patients who did not receive physical treatment (group a). The mean speed of recovery in group b was the half of that recorded for group a (non-Kabat subjects). No difference was observed in the incidence of synkineses between the two groups. Steroid treatment appears to provide better and faster recovery in severe cases (HB IV and V) of BP when complemented with Kabat physical rehabilitation.

1. ANATOMIA: **Articolazione e muscoli della spalla.**
2. FISIOTERAPIA: **Rieducazione Posturale Globale: indicazioni e modalità di applicazione.**
3. STATUTO: **Il Direttore Generale: compiti e funzioni.**
4. INFORMATICA: **Dopo aver esposto i principali usi di Word il candidato spieghi come si salva un documento.**
5. INGLESE: **Low-level laser therapy for chronic non-specific low back pain: a meta-analysis of randomised controlled trials**

Abstract: **Objective:** The efficacy of low-level laser treatment (LLLT) for chronic back pain remains controversial due to insufficient trial data. We aimed to conduct an updated review to determine if LLLT (including laser acupuncture) has specific benefits in chronic non-specific low back pain (CNLBP). **Methods:** Electronic databases were searched for randomised trials using sham controls and blinded assessment examining the intervention of LLLT in adults with CNLBP. Primary outcomes were pain and global assessment of improvement with up to short-term follow-up. Secondary outcomes were disability, range of back movement, and adverse effects. A random effects meta-analysis was conducted. Subgroup analyses were based on laser dose, duration of baseline pain, and whether or not laser therapy used an acupuncture approach. **Results:** 15 studies were selected involving 1039 participants. At immediate and short-term follow-up there was significant pain reduction of up to WMD (weighted mean difference) -1.40 cm (95% CI -1.91 to -0.88 cm) in favour of laser treatment, occurring in trials using at least 3 Joules (J) per point, with baseline pain <30 months and in non-acupuncture LLLT trials. Global assessment showed a risk ratio of 2.16 (95% CI 1.61 to 2.90) in favour of laser treatment in the same groups only at immediate follow-up.

1. ANATOMIA: **Anatomia della mano.**
2. FISIOTERAPIA: **Idrokinesiterapia: parametri su cui si sviluppa l'esercizio terapeutico in acqua.**
3. STATUTO: **Il candidato esponga le attività di ricerca e didattiche dell'Università.**
4. INFORMATICA: **Il candidato, dopo avere brevemente illustrato i principali usi di excel, spieghi se è possibile creare un grafico.**
5. INGLESE: **Chronic low back pain and postural rehabilitation exercise: a literature review**

Abstract: Chronic low back represents one of the major causes of disability worldwide. Our narrative review has the purpose of highlighting the evidence supporting the different rehabilitative techniques described for its management. In total, 26 studies were found suitable to be included in the review (14 articles about pilates, six about McKenzie (MK), one article about Feldenkrais, three about Global Postural Rehabilitation (GPR) and two about Proprioceptive Neuromuscular Facilitation). The effect of exercise therapy was examined for each single study through changes in the main clinical outcomes (pain, disability,) quality of life (QoL) and psychological aspects and the targeted aspects of physical function (muscle strength, mobility, muscular activity and flexibility). All the techniques are effective for the study groups with respect to the control groups in reducing pain and disability and improving the QoL and maintaining benefits at follow-up; pilates, Back School, MK and Feldenkrais methods reduce pain and are more efficient than a pharmacological or instrumental approach in reducing disability and improving all psychological aspects also. GPR shows long lasting results for the last outcome. To date, it is difficult to affirm the superiority of one approach over another. Further high quality research is needed to confirm the effect of these techniques, together with the use of more appropriate evaluation measures.