Objectives To develop management strategies by reviewing evidence base and current practice to increase numbers of patients seen in an orthopaedic clinic and improve the cost effectiveness and quality of health care.

Methods Evidence from literature and current practice by expert opinion was collated and analysed; from which evidence-based guidelines for the physiotherapy management of anterior knee pain (AKP) were formulated. Forty patients who presenting to an Orthopaedic clinic with AKP were assessed by a Clinical Specialist Physiotherapist and offered physiotherapy treatment, according to the guidelines. Management and treatment outcomes were audited.

Results 40 extra new patients were assessed in an orthopaedic clinic over 8 months (Age range 11–53 years, mean 25 years, symptom duration ranges 6 months–16 years). 57% of the patients had not received any previous physiotherapy for their AKP. 3 patients were not offered physiotherapy and 3 were transferred to other physiotherapy departments. 5 did not attend a full course of treatment. 29 completed their treatment. Treatment duration ranged from 4–32 weeks, with a mean of 15 weeks. The number of treatments per patient ranged from 3–12 with a mean of 6.

Treatment was tailored to the individual patient and consisted of education and exercises aimed at improving postural alignment, balance and the timing of the vastus medialis obliquus, gluteal and abdominal muscles. Manual therapy techniques and stretches were used to elongate tight structures e.g. hamstring, gastrocnemius, muscles and ilio-tibial bands and lateral retinaculum. Patello-femoral taping was used in 26% of cases, trigger point acupuncture in 33% of cases to provide some pain relief during their course of rehabilitation and 7% were provided with insoles.

At final assessment of the 29 patients that completed treatment, 52% stated that they were pain free. 22% stated that they were between 70–90% better. 15% stated that they were between 50–70% better. 7% were unresponsive to treatment. A proposal for an integrated care pathway for the management of AKP has been developed from these results and presented to the physiotherapists in Cornwall.

Conclusion Current literature and expert opinion advocates conservative management of anterior knee pain in the form of physiotherapy targeted at reconditioning lower limb musculature to improve patellofemoral biomechanics over surgical intervention. The results of this project support the literature but many patients are not being referred appropriately to Physiotherapists. an integrated care pathway for AKP has the potential to create a co-ordinated cost effective approach to patient care.

Pain: dealing with pain and pain management

HP0019 PHYSIOTHERAPIST/STUDENT FOR THE DEGREE OF MASTER OF SCIENCE

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An investigation on the effect of education or education in combination with physical training on pain experience in women with osteoporosis.

Introduction Pain and fear of fracture are very common among patients with osteoporosis reducing their activity of daily living and quality of life. We have investigated the effect of education or education in combination with physical training in women with osteoporosis.

Methods Women older than 60 years with osteoporosis (N = 49) were enrolled in the study. All were able to walk indoor without technical support. Bone density was assessed using a DXA-machine.

All were hospitalised for five days in a hospital of rheumatology. They were casually put into two different treatment programs:

- Education (n = 26)
- Education in combination with physical train (n = 23)

The education program was provided by a team of professional health workers and had a multifactorial approach to problems experienced by patients with osteoporosis. The training program was conducted by two physiotherapists.

Health was assessed by SF-36 questionnaire at baseline, and then after 3 and 12 months.

Results A multivariate analysis for repeated measurements showed an improvement of bodily pain score of 7.4 (95% CI 2.7–12.1) after 3 months and 9.8 (95% CI 4.2–15.4) after 1 year compared with baseline. There were no significant differences between the groups. Physical activity and social function were also statistical improved at 3 month, but the improvement did not persist for the complete follow-up period.

Conclusion Participation a professional education program reduces the pain experience in women with osteoporosis, and the improvement appear to persist for at least one year. This result needs confirmation by further studies.

HP0020 PAIN TREATMENT OF THE RHEUMATIC DISORDERS WITH ELECTRIC THERAPY

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Pain relief is one of the most important assignments of physical therapy (PT) and for that purpose different procedures have been used. Their advantage is that they have no side effects, which is very important for rheumatic patients, who are forced to take NSAIDs for a very long period.

The aim of this work was to investigate effects of different electric procedures on pain and joint swelling of rheumatic patients.

Material and methods The investigation was conducted on 40 patients with knee osteoarthritis and rheumatoid arthritis. Every knee was treated with different electric procedure. Mean age of patients was 54.6 years (SD 8.9), and mean duration of the illness was 12.1 years (SD 8.7). Interferrent, modulated and galvanic currents have been used. Treatment lasted for four weeks and in that period every patient received 20 therapies. Pain degree has been evaluated according to analogue visual scale - VAS (0–100) before and after the treatment. At the end of the treatment patients and physicians have given their evaluation of the PT effect separately with grades from 1 to 5 (1- poor effect and 5 - excellent effect).

Results All three currents had good analgesic effect and there was a statistically significant difference in the pain evaluation