

an injection were allocated. Diagnosis was discussed and confirmed with the Rheumatologist. The results of the first 56 patients (23 male) to attend have been audited.

Diagnosis Was as Follows: Adhesive Capsulitis 21, Supraspinatus Tendinitis 11, Rotator Cuff Lesion 7, Non-specific shoulder pain 5, Occupation related shoulder pain 3, Bicipital Tendinitis 3, Thoracic outlet compression 1, Acromioclavicular joint pain 1,

Posture related shoulder pain 1, Fibromyalgia 1, Referred pain from hepatic secondaries 1, Secondary deposit 1.

In 18 patients (32%) the clinic and GP diagnoses were the same. In 16 (28.6%) they differed and in 22 (37.5%) the GP letter indicated painful shoulder but no specific diagnosis.

Of these patients 36 (64%) were treated with injection. The remaining 20 (36%) were not injected for the following reasons: Symptoms resolved 12, Patient declined 3, Inappropriate 4, Reason not recorded 1.

Of the 56 patients audited, 49 were available for review by telephone at a minimum of 3 months after initial visit. The results of this interview showed that 17 had complete resolution of symptoms, 21 had more than 50% improvement, 1 less than 50% improvement, 5 said their symptoms were unchanged and 5 stated their symptoms were worse.

Conclusion: A RNS shoulder injection clinic works well but the range of possible diagnoses requires close collaboration with the Rheumatologist.

THURSDAY, 14 JUNE TO SATURDAY, 16 JUNE 2001

Osteo-arthritis

HP0010 LONG-TERM EFFECTS OF NONSTEROIDAL ANTINFLAMMATORY DRUGS ON HUMAN CHONDROCYTES IN ALGINATE BEADS

C. Sanchez, M. Deberg, J.-Y. Reginster, Y. Henrotin. *Bone and Cartilage Metabolism Research Unit, University Hospital, Sart-Tilman, 4000 Liège, Belgium*

This study was designed to compare the long-term effects (12 days) of nonsteroidal anti-inflammatory drugs (NSAID) on the metabolism of human chondrocytes cultured in alginate beads.

Enzymatically isolated osteoarthritic (OA) chondrocytes were cultured in alginate beads in a well-defined culture medium (DMEM +ITS+) for 12 days. Interleukin-6 and -8 (IL-6, IL-8), stromelysin (MMP-3) and aggrecan (AGG) productions were assayed by specific enzyme amplified sensitivity immunoassays (EASIA), and prostaglandin E2 (PGE2) production by a specific radioimmunoassay. All NSAID were tested at the mean peak plasmatic concentration (Cmax) obtained after oral administration of a therapeutic dose. The Cmax used in this study were 7.5 mg/ml for aceclofenac (ACECLO), 1.4 mg/ml for diclofenac (DICLO), 2 mg/ml for indomethacin (INDO), 3 mg/ml for nimesulide (NIM), 1 mg/ml for rofecoxib (ROFE), 0.7 mg/ml for celecoxib (CELE), 7 mg/ml for piroxicam (PIROX), and 25 mg/ml for ibuprofen (IBUP).

At the therapeutic concentration, all NSAID tested fully blocked PGE2 production. Interestingly, ACECLO, DICLO, INDO, NIM and IBUP significantly inhibited both basal and IL-1 β -stimulated IL-6 production, whereas ROFE, CELE and PIROX had no significant effects. No NSAID showed significant effects on basal and IL-1 β -stimulated IL-8 production, excepted CELE and IBUP which slightly increased basal IL-8 production. ACECLO and INDO increased by 25% AGG content in the alginate beads, while the other NSAID were without significant effect. Furthermore, none NSAID were able to modify the inhibitory effect of IL-1 β on AGG production. Finally, NSAID did not modify MMP-3 production.

From this study, we can conclude that the mechanism of action of NSAID seems to be multifactorial and not limited to the inhibition of cyclooxygenases. Furthermore, in our culture conditions, at the Cmax and by comparison with other NSAID ACECLO and INDO show a advantageous profile of activity. They fully block PGE2 production, inhibit IL-6 synthesis and increase aggrecan synthesis. These effects would appear to be advantageous for the long-term treatment of chronic joint diseases such as osteoarthritis.

HP0011 WHAT IS THE DEMAND FOR OSTEOARTHRITIS SELF-MANAGEMENT EDUCATION?

M.M. Rooney¹, D.V. Doyle¹, C. Tierney¹, M. Greenwood¹. ¹ *Rheumatology, Whipps Cross Hospital, London, UK*

Background: People with arthritis in the UK can obtain significant health benefits from attendance at a lay-led arthritis self management programme [1]. We have found significant improvements in knowledge relevant to self-management following attendance at a nurse-led community-based osteoarthritis (OA) education programme and an 82% reduction in OA-related visits to the GP in the 12 months following [2]. It was envisaged that there could be substantial benefits to quality of care and savings in terms of healthcare resources if in future GPs were to have the option of referring patients with OA-related problems to such a programme run regularly within their own surgery by their

practice nurse. Potentially demand could be high. Over the period of one year, 25% of UK and Netherlands over 55 year olds are reported to have experienced persistent knee pain prompting one in six to have consulted their GP[3].

Aim: To evaluate the feasibility of implementing such a scheme in general practice and to assess the uptake of the course by both GPs and their patients.

Method: 12 GPs at 6 practices were able to refer to the nurse-led OA self-management programme by a simple referral slip) any patients they considered suitable, provided that he or she had consulted them that day for a problem related to OA hip or knee. The programmes of three 2-hour sessions were held locally. A leaflet about the programme was to be given to the patient. Patients could apply by completing the short attached questionnaire and returning it in the stamped addressed envelope provided.

Results: Over 9 months only 44 patients have been referred, 37 of which were interested in attending. Of the 23 so far booked into completed programmes, 11 have attended all three sessions, 5 have attended 2, and 3 have attended 1. 4 did not attend at all. The response of those who have attended has been very positive but a follow up questionnaire is planned to elicit the opinions of all those referred including nonattenders.

Discussion: The rate of referral from the GPs has been far lower than anticipated. Pressure on GP time might have been a factor but the GP referral method was deliberately kept as simple as possible – hardly more detailed than a blood test request form. A number of other possibilities need to be explored: 1. Did patients consult their GP about their OA as often as anticipated? 2. Did the GPs fail to refer many suitable patients and 3. If so does this suggest that the participating GPs placed only a low value on patient self-management education for OA?

References

- Barlow JH, Turner AP, Wright CC A randomized controlled study of the Arthritis Self-Management Programme in the UK. *Health Educ Res* 2000 Dec; 15 (6): 665–80
- Rooney M, Doyle D.V, Greenwood M, Tierney C. "Evaluation of a Community Based Arthritis Self Management Programme (ASMP) for People with Osteoarthritis (OA). In: *EULAR Abstracts* 1999: 81–82
- Peat G, McCarney R, Croft P. Knee pain and osteoarthritis in older adults: a review of community burden and current use of primary health care. *Ann Rheum Dis* 2001 Feb; 60 (2): 91–97

HP0012 THE DISCRIMINATORY VALIDITY OF THE NEW ZEALAND SCORE FOR HIP AND KNEE SURGERY IN A UK POPULATION

F.M. Toye¹, S.E. Lamb², J.H. Barlow², C.C. Wright². ¹ *Physiotherapy Research, Nuffield Orthopaedic Centre, Oxford;* ² *School of Health and Social Sciences, Coventry University, Coventry, UK*

Background: There is currently no standardised method for prioritising patients joint replacement surgery in the UK. The New Zealand (NZ) score could be used to assist prioritisation (Hadorn 1997). This approach has not been tested in the UK.

Objectives: To determine whether the NZ score is associated with measures of pain and function, in a sample of 176 people who were currently waiting for, or being considered for total knee replacement.

Methods: Patients completed the WOMAC scores, a Likert scale for distress (0–4), and a 100 mm VAS for pain. Leg power was tested using a leg extensor power rig. The number of sit to stands in one minute was recorded. In NZ a cut off point of between 55–65 is used. Those scoring below 55 are not recommended for surgery. Patients were stratified into 2 groups. The first group included all those scoring below 55, and the second group all those who scored 55 or above. Spearman's correlation was performed to identify correlation between the NZ score and other measures. Mann-Whitney tests were performed in order to test differences between groups.

Results: 44% were male, with a mean age of 69 (SD 9). Mean duration of symptoms was 10 years (SD 12), and mean VAS score for pain was 57 (SD 24). 68% were already listed for surgery. Significant correlations were found between the NZ score and all other measures $p < 0.01$ (2-tailed). A higher NZ score was associated with more pain, less functional ability and reduced strength. The Rho values are shown in the table. Median scores for all measurements were significantly different between the two groups $p < 0.01$ (2-tailed). 28% scored 55 or above, 85% of these were already listed for surgery, 67% were listed as "routine" cases and 33% were listed as "soon". Those scoring above 55 were weaker, had reduced function, and more pain

	Spearman's Rho value NZ score versus other measures	Group 1 Median Score	Group 2 Median Score
WOMAC function	0.54	1.92	2.57
WOMAC pain	0.50	1.90	2.50
Sit to stands in 1 minute	-0.52	9.00	0.00
Pain VAS score	0.52	52.00	76.00
Leg extensor power/BMI	-0.54	1.18	0.29

Spearman's correlation showing association between NZ score and other measures, along with median scores of group 1 (scoring under 55) and group 2 (scoring 55 or over).