SAT0115 EFFICACY OF CELECOXIB IN PATIENTS WITH ACUTE SHOULDER PAIN: RANDOMISED DOUBLE-BLIND COMPARISON WITH NAPROXEN

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Background

Objectives To evaluate and compare the efficacy of 14-day dosing with celecoxib 200 mg BID and naproxen 500 mg BID in patients with acute shoulder pain.

Methods Patients with pain onset within the previous 14 days and pain intensity of > = 40 mm on a 100-mm VAS were randomly assigned to enter one of two parallel groups of a double-blind controlled, multicenter study. The primary assessment was pain at rest.

Results The primary ITT analysis was conducted in 202 randomised and treated patients, 99 in the celecoxib group and 103 in the naproxen group. Baseline characteristics were similar (47 ± 12 years of age; mean duration of acute episode, 5.6 ± 5.1 days). At 14 days, the mean (± SE) decrease in pain at rest was not statistically significantly different between the two groups. According to the limits of 95% CI of the difference between groups, celecoxib seemed to be at least as effective as naproxen. Fewer patients experienced epigastric pain with celecoxib (7 patients vs 14 with naproxen). This adverse event led to treatment discontinuation in 2 patients receiving celecoxib and 5 receiving naproxen. One patient with a history of ulcer had duodenitis (Hp positive) in the celecoxib group.

Abstract SAT0115 Table 1

	Changes from Baseline Celecoxib	Changes from Baseline Naproxen	Difference Between Groups
Pain at rest (VAS 0–100 mm)	-47.9 (± 2.5)	-42.3 (± 2.5)	-5.6, p = 0.1167 (95% CI [-12.5, +1.4])

Conclusion This study provides data in favour of the use of celecoxib, which is probably at least as effective as naproxen in acute shoulder pain. Observed upper GI events rates in this study of limited sample size do not permit drawing conclusions in terms of improved GI safety, which has previously been shown in larger randomised controlled trials.

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SAT0116 EFFICACY OF CELECOXIB VS IBUPROFEN AND NAPROXEN IN THE TREATMENT OF ANKLE SPRAIN

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Background Ankle sprain is a common acute soft-tissue injury that often results in swelling, pain, inflammation, and ecchymosis.

Objectives We hypothesised that celecoxib, a COX-2 specific inhibitor, would be as effective as conventional NSAIDs and better than placebo in the treatment of ankle sprain.

Methods Two separate multicenter, randomised, double-blind studies were conducted: (1) celecoxib 400 mg/d (n = 147) vs ibuprofen 2400 mg/d (n = 155) or placebo (n = 141) over 10 days, and (2) celecoxib 400 mg/d (n = 198) vs naproxen 1000 mg/d (n = 198) over 8 days. Patients had grade 1 or 2 ankle sprains and moderate-to-severe pain on weight bearing [>/= 45 mm, 100-mm VAS] at baseline.

Results Most patients were male (60% and 67% for ibuprofen and naproxen comparator studies, respectively); mean ages were 31 and 30 years for ibuprofen and naproxen comparator studies, respectively. The first study dose was taken within 48 h after the injury occurred (mean duration: 25.6 and 23.2 hrs for ibuprofen and naproxen comparator studies, respectively). Covariate-adjusted analyses of the primary endpoints (Patient's Global Assessment of Ankle Injury responder rate, and Patient's Assessment of Ankle Pain VAS on weight-bearing) demonstrated that celecoxib was significantly more effective than placebo and as effective as ibuprofen and naproxen in improving the signs and symptoms of ankle sprain. Median times to return to normal function/activity or to improve function by at least 2 grades (5-pt scale) were 5 days for celecoxib-, 6 days for ibuprofen-, and 8 days for placebo-treated patients (celecoxib vs placebo, p = 0.001) in the ibuprofen comparator study and 5 days for both groups in the naproxen comparator study.

Abstract SAT0116 Table 1

	Responder Rates [n (%)] on Patient 's Global Assessment of Ankle Injury *			Patient's Ankle Pain (VAS), mm** Mean (SE)		
	Celecoxib	Ibuprofen	Placebo	Celecoxib	Ibuprofen	Placebo
Baseline[§]	..	..	..	68.5 (14.1)	68.2 (14.8)	71.3 (12.1)
Day 4	99 (67%)[†]	110 (71%)	77 (55%)	35.3 (1.6) [†]	36.6 (1.6)	42.4 (1.6)
Day 8	121 (82%)[†]	126 (81%)	101 (72%)	23.3 (1.8) [†]	24.3 (1.8)	31.2 (1.8)
Day 11	133 (90%)[†]	142 (92%)	124 (88%)	15.6 (1.8) [†]	15.7 (1.8)	19.9 (1.8)
	Celecoxib	Naproxen	Placebo	Celecoxib	Naproxen	Placebo
Baseline	..	..	..	67.6 (14.5)	67.5 (13.1)	..
Day 4	139 (71%)[‡]	142 (72%)	..	31.9 (2.0) [†]	29.0 (1.9)	..
Day 8	175 (89%)[‡]	178 (90%)	..	15.0 (1.7) [†]	15.3 (1.7)	..

*Improved by >/= 1 grade on 5-pt scale from 1 (very good) to 5 (very poor); **covariate-adjusted; [†]celecoxib not inferior to ibuprofen or naproxen based on 95% CI; [‡] p >/= 0.51; [§]VAS score = Mean (SD).

Conclusion Celecoxib is as effective as the maximum recommended dose of ibuprofen and naproxen for pain and superior to placebo in treating ankle sprains. Celecoxib, with its platelet-function-sparing properties, may offer an advantage over ibuprofen and naproxen in managing ankle sprain injuries.

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SAT0117 PROGLUMETACIN AND THE PREVENTION OF ECTOPIC OSSIFICATION FOLLOWING TOTAL HIP REPLACEMENT

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Background Ectopic ossifications (EO) following total hip replacement are possible and known post-operative complications, developing in about 60% of patients during the first 4–12 weeks after implantation. There is no treatment but surgery, therefore preventive measures are considered to be indispensible. Proven and sufficient measures to prevent EO are radiation treatment or treatment with non-steroidal anti-inflammatory drugs (NSAIDs). These measures are able to reduce EO to occur in about 10% of prophylactically treated patients.
Objectives The objective of this retrospective study was to evaluate our practice of treating patients postoperatively with the NSAID proglumetacin – a molecular combination of indomethacin with the gastroprotective substance proglumid – and to compare the success rate with that of competitive preventive treatments.
Methods During the years from 1995 to 1997 there were 560 patients in our orthopaedic department who underwent total hip replacement, in most of them because of osteoarthritis of the hip. Other reasons for surgery were femur head necrosis, rheumatoid arthritis, femoral neck fractures or loosening of an already existing hip endoprosthesis. Immediately after surgery, 2 weeks and again 2 months later, and, if possible, also 6 months later, control X-rays were performed. Signs of ossification were objectified using the Brooker classification.
Results 545 of these patients (573 women, 188 men; mean age: 66.8 ± 9.7 years; body weight: 75.6 ± 13.2 kg; body length: 167.3 ± 8.5 cm) were postoperatively treated for 3 weeks with proglumetacin. X-ray films of all patients after surgery showed no ossification, just as after 2 weeks the films of 506, after 2 months of 473, and after 6 months of 263 (of 329 re-examined) patients. Clinically not relevant ossifications (class I or II according to Brooker) were seen after 2 weeks in 37 patients (6.8%), after 2 months in 57 patients (10.5%) and after 6 months in 65 (11.9%) patients. Of all patients treated for at least one week no one (0.0%) showed a clinically relevant ossification (class III or IV). Two patients showing class III ossification were prophylactically treated only for 6 and 4 days, respectively. Concerning EO occurrence, in our patients there was no correlation with gender, kind of prosthesis or anaesthesia, duration of hip disease, or risk factors like already performed total hip replacement and diabetes mellitus, respectively.

Concerning safety only 43 patients (7.9%) complained of minor or increasing gastric adverse drug reactions, requiring additional gastroprotective drug therapy or even stop of treatment.
Conclusion In conclusion, the non-steroidal anti-inflammatory drug proglumetacin is very safe and at least as effective as other preventive measures and very safe. In our view, proglumetacin therefore represents a favourable and economic alternative treatment.

REFERENCES

1 Brooker AF, *et al*. Ectopic ossification following hip replacement: incidence and a method of classification. *J Bone Joint Surg Am*. 1973;**55**:1629–32
2 Eulert J, Knelles D, Barthel T. Heterotope Ossifikationen. Orthopäde 1997;26:399–406
3 Förster KK, Haasters J, Schmid K, Thiede A. Prevention of heterotopic ossifications after total hip replacement with a non-steroidal anti-inflammatory drug (abstract). *Eur J Clin Pharmacol*. 1997:A11
4 De Pouvourville G. Evaluating the real cost of NSAID therapy; "shadow costs" relating to the treatment of gastrointestinal side effects. *Br J Med Econ*. 1992;**5**:45–50

Cell receptor-ligand interaction signalling and activation

AB0008 CERULOPLASMIN, TRANSFERRIN AND INTRACELLULAR ADHESION MOLECULE-1 IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background
Objectives We studied serum levels of soluble intercellular adhesion molecule-1 (sICAM-1), ceruloplasmin (CP) and transferrin (Tf) and investigated the correlation of these parameters with the disease activity.
Methods Serum sICAM-1 levels were determined with sandwich enzime-linked immunosorbent assay (ELISA) in sera from 42 patients with RA and in 30 healthy controls. Erythtrocyte sedimentation rate (ESR) was determined according to the Westhergen method and C-reactive protein (CRP), CP and Tf by nephelometric method. Disease activity was assessed by disease activity criterias.
Results Although decreased serum Tf level, serum levels of sICAM-1 and CP were significantly higher in patients with RA than in healthy controls. It was found that sICAM-1 had a negative correlation with Tf ($r = ?0.47$, $p < 0.01$) and a positive correlation with CP ($r = 0.49$, $p < 0.001$). There was a weak but statistically significant positive correlation between sICAM levels with Ritche articular index (RAI) score and CRP ($r = 0.32$, $p < 0.05$; $r = 0.44$, $p < 0.01$, respectively), whereas no significant correlation was observed between sICAM-1 levels with ESR, age and disease duration. There was no correlation between values of CRP, RAI and ESR with serum CP and Tf.
Conclusion These data show that the decreases in serum CP and Tf levels and increases in sICAM-1, ESR and CRP levels are present in RA, and that the decrease in serum CP and Tf levels in RA might be due to increased sICAM-1, and increased levels of sICAM-1 and correlations with other parameters may be a significant and novel marker for evaluating the disease status and the activity of RA.

OP0001 REDOX-SENSITIVE CHANGES IN CONFORMATION AND CELLULAR LOCALIZATION OF LAT AND DOWNSTREAM TCR SIGNALLING LEAD TO HYPORESPONSIVENESS OF SYNOVIAL FLUID T CELLS IN RHEUMATOID ARTHRITIS

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Background In rheumatoid arthritis (RA), the synovial fluid (SF) T lymphocytes present in the inflamed joints, display