patients using EET (any EET patients and dropouts were considered non-responders), 2) observed data for all patients from baseline, and 3) observed data for only EET patients during the entire 1-year period.

Signs and symptoms of AS were reduced in patients treated with adalimumab in the first 12 weeks and improvements were sustained for 52 weeks. There were 66 placebo patients at week 12, 7 at week 16, and 2 at week 20 that switched to EET. By week 52, 88.6% of the patients remained in the study.

The Clinical Efficacy and Safety of Subcutaneous Oral Application of Methotrexate in Patients with Active Rheumatoid Arthritis — Results of a Randomized, Controlled, Double-Blind, Multi-Center Study

Although oral MTX for the treatment of RA has been shown to be effective, adverse events may lead to discontinuation of treatment. This study reports the 24-week comparison of the safety and efficacy of subcutaneous (sc) vs orally administered MTX in patients with active RA. Patients with insufficient oral responses were switched to sc application or dose augmentation after 4 months.

Patients were randomly assigned to 15 mg oral MTX (two 7.5 mg tablets + a dummy pre-filled syringe) or sc MTX (15 mg via a pre filled syringe at 10mg/ml + dummy tablets) given weekly until week 24. At week 16 ACR20 nonresponders were switched from oral MTX to 15 mg sc and from 15 mg MTX sc to 20 mg sc for the remaining 8 weeks in a blinded fashion, respectively. The primary outcome parameters were the ACR20 after 24 weeks. Secondary outcome parameters were ACR50/70/90 and DAS28/EULAR response criteria after 24 weeks, and time to onset of ACR20.

Only 15% of the patients were classified as ACR20 nonresponders at week 16 and switched medication. After 24 weeks the sc route of MTX application yielded a significantly higher efficacy in various relevant parameters including improvement in ACR20/50/70 response rates and EULAR response rates compared to the oral administration. Remission (defined as DAS28 <2.6) was achieved by 34% of the sc MTX patients compared with 24% of the oral MTX treated patients ($p<0.05$).

In this first of kind study, the authors concluded that MTX given sc is significantly more effective than the oral form.

Intensive Treatment with MTX of Early Rheumatoid Arthritis Patients is Beneficial When Compared to Conventional Treatment With MTX: A Two Year Study

Intensive treatment with MTX can increase the number of patients responding to treatment. In a two-year study conventional and intensive MTX treatment strategies were compared in the treatment of patients with early RA using a computer assisted program. In the conventional strategy, patients came to the outpatient clinic once every 3 months and were given an adjusted MTX dose based on daily practice.

In the intensive strategy, patients came to the clinic monthly and were given an adjusted dose of MTX tailored to the individual, aimed for remission, and based on predefined criteria (>20% improvement from the previous visit for the number of swollen joints, number of tender joints, ESR and VAS general well-being). In both groups, starting dose of MTX was 7.5 mg/wk and could be increased up to 30 mg/wk, if needed.

The computer program, used to determine the clinical response, was also evaluated in this study.

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Dr. L.A. Fitzpatrick, Amgen, Thousand Oaks, CA, reported on the efficacy of denosumab (AMG 162; a fully human monoclonal antibody that binds to and inhibits RANKL) in postmenopausal women with low BMD. Subjects treated with denosumab for 24 months had significantly greater increases in lumber spine, total hip, distal 1/3 radius, and total body BMD compared with placebo treated patients ($p<0.001$). Denosumab also caused significant sustained suppression of bone turnover markers serum C-telopeptide and urine N-telopeptide/ creatinine compared with placebo ($p<0.001$).

Dr. Wim Goettsch, PHARMO Institute, Utrecht, Netherlands, presented evidence showing that low persistent use of bishosphonates for one year resulted in a significant, 26% lower, fracture rate, whereas 2 year use resulted in a 32% lower rate in women hospitalized for previous osteoporotic fractures.

Osteoporosis is a multifaceted disease that until recently has been both under-diagnosed and under-treated. New emphasis on the disease and recent developments in the field of osteoporosis research has provided clinicians with new treatments and prevention strategies.

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Treating depression in FM often does not diminish reporting of pain and medically unexplained symptoms, but it may improve social function. Graded exercise produces improvements in functional work capacity and fatigue, while fluoxetine improves depression only (*Br J Psychiatry*. 1998;172:485-90).

Disrupted sleep appears to complicate the course of FM. For the most part, sleep complaints are either attributable to the lifestyle of FM patients, or seem inherent to the underlying condition of FM. They are generally unrelated to depression or anxiety in FM.

The correlation between tissue pathology and the perceived severity of the chronic pain experience is poor or even absent. More importantly, chronic pain seldom responds to the therapeutic measures that are successful in treating acute pain.

Dr. Morriss concluded by saying that "psychological treatments focused on the needs of the FM patients can improve clinical care, but research evidence does not support a complete shift of focus away from pain relief." Thus, for optimal management of FM, he recommends a blend of multidisciplinary group therapy and individualized clinician-based treatment.

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The endpoint of the study was the number of patients in remission defined as no swollen joints plus 2 out of 3 of the following criteria: number of tender joints ≤ 3, ESR ≤ 20 mm/hr1st, and VAS general well-being ≤20 mm fulfilled at three subsequent visits measured at three monthly intervals.

Sixty-three (41%) of the patients in the intensive strategy group achieved remission for at least 6 months versus 24% of the patients in the conventional strategy group ($p= 0.002$). Mean time until first remission was 10 months for the intensive strategy group compared with 13 months for conventional strategy group. Median (IQ 0.25-0.75 range) AUC of all clinical variables were significantly better for the intensive strategy group when compared to the conventional strategy group.

Tailoring the MTX treatment to the individual patient is significantly more beneficial than the conventional approach. Furthermore, a computer assisted approach, to make more objective decisions on dosage changes, may be beneficial.