A COMPARISON OF CLINICAL EFFICACY OF LEFLUNOMIDE VS OTHER THERAPEUTIC OPTIONS IN THE TREATMENT OF RHEUMATOID ARTHRITIS

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OBJECTIVES: The objective of this study was to compare efficacy and safety of leflunomide with biological antirheumatic drugs (adalimumab, etanercept, infliximab, rituximab, anakinra) in active rheumatoid arthritis. METHODS: Comparison was based on systematic review, carried out according to guidelines published by the Cochrane Collaboration and Agency for Technology Assessment in Poland. The most important medical databases (EMBASE, MEDLINE, CENTRAL) were searched. Two reviewers independently selected trials, assessed trial quality and extracted data. No head to head trials were identified so indirect comparison using Bucher’s method was performed. RESULTS: The results of 33 randomized controlled trials were included in indirect comparison. Leflunomide was shown to have better ACR20 response than anakinra (RR = 1.44 [1.14; 1.81]) but no significant differences in ACR response were found in comparisons with other drugs. Comparisons of HAQ disability scores indicate than leflunomide reduces disability better than adalimumab (WMD = –0.15; [−0.29; –0.01]), rituximab (WMD = –0.35 [–0.50; –0.20]), anakinra (WMD = –0.47 [–0.69; –0.25]), rituximab (WMD = –0.38 [–0.59; –0.17]), but not etanercept (WMD = –0.18 [–0.37; 0.01]). Radiographic improvement was better in comparison with anakinra (WMD = –2.99 [–5.82; –0.16]) and rituximab (WMD = –4.05 [–6.67; –1.43]) whereas worse in comparison with adalimumab (WMD = 2.67 [0.87; 4.47]), etanercept (WMD = 1.75 [0.01; 3.49]) and infliximab (WMD = 2.06 [0.42; 3.70]). Leflunomide significantly increases the risk of treatment discontinuation due to the adverse events in comparison with etanercept (RR = 3.50 [1.55; 7.88]). No significant differences in safety outcomes were noted between leflunomide and other drugs. CONCLUSIONS: Indirect comparisons indicate similar efficacy of leflunomid, adalimumab, etanercept, infliximab or rituximab. Leflunomide seems to be more effective than anakinra. Safety profile of leflunomide is worse in comparison with etanercept, whereas in comparison with other analyzed drugs no differences were found.

PREVALENCE OF FIBROMYALGIA IN GERMANY

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OBJECTIVES: To assess the estimated prevalence of fibromyalgia syndrome (FM) among the adult population in the general population, in Germany, using the London Fibromyalgia Epidemiology Study—Screening Questionnaire (LFESSQ) and American College of Rheumatology (ACR) classification criteria. METHODS: Every patients going to visit the rheumatologist in Munich hospital during a 30-days period, were interviewed using the validated LFESSQ (4 items) with two additional questions on fatigue (LFESSQ 6 items), and examined to confirm the diagnostic of FM using ACR classification criteria. The screening questionnaire was also administered to a representative community sample more than 15 years old, selected by the quota method. The prevalence of FM was estimated in the general population, applying the predictive positive value observed in rheumatology consultation, to the positive screens, RESULTS: A total of 52.6% patients interviewed in the rheumatology department were screened positive for chronic widespread pain (LFESSQ 4), 42.7% for widespread pain and fatigue (LFESSQ 6), 16.4%[15.8–16.9] were confirmed FM cases. Based on positive screens for chronic widespread pain and LFESSQ 4, the prevalence of FM in general population, is 5.8 % (95% IC: [4.3–7.2]; 7.5% in females and in 3.8% males respectively). If fatigue is added, the prevalence is 3.2 % (95% IC: [2.1–4.3]) ; 3.9% in females and 2.5% in males respectively. Prevalence rises with age until the age group 75–84 years old. FM sufferers are females wit an average age of 53.5 years old (SD: 12.4). CONCLUSIONS: Our findings are slightly higher than those obtained in our study in France, Spain and Portugal, and those published in Canada, US or Spain, probably due to the different methodologies and populations used. Symptoms of pain as fatigue must be obtained from systematic review of published literature. The model compares four groups: leflunomide, infliximab, etanercept and adalimumab, all in combination with MTX, under the perspective of Public Health Sector in Mexico. We included direct costs of medications during 24 weeks and costs associated with therapeutic failure due to adverse events or lack of efficacy. In those cases, we calculated initial treatment costs during 8 weeks, and after treatment changed, it was estimated an average cost of biological therapy for the 16 remaining weeks. The effectiveness measure was the response rate according to the American College of Rheumatology criteria (ACR). The analysis was conducted using Tree Age Pro Suit 2006. RESULTS: The proportion of patients reaching an ACR20 response was 50% for leflunomide, 53% for infliximab, 61.6% for adalimumab and 67.9% for etanercept. The expected costs of 24 weeks of treatment were €891.2, €4274.5, €5054.5 and €4072.3 for leflunomide, infliximab, adalimumab and etanercept, respectively. The cost per patient with ACR20 improvement was €1781.8 for leflunomide, €8205.8 for adalimumab, €8069.9 for infliximab and €5996.7 for etanercept. The average cost per patient reaching an ACR50 or ACR70 response was also much lower for leflunomide (€3,248.7, €8,999.2) than for the biological agents: etanercept (€ 9492.6, €23,424.6), adalimumab (€ 12,290.4, €23,646.5), infliximab (€14,726.1, €40,349.5). CONCLUSIONS: Leflunomide added to MTX is a cost-effective strategy compared to infliximab, adalimumab and etanercept, each one added to MTX in patients with suboptimal response to MTX monotherapy. Therefore, we recommend the use of leflunomide for patients with refractory RA with suboptimal response to MTX, before using a biological agent.