

and a longer duration of disease (months) (5.7 ± 1.6 vs 3.1 ± 3.2 , $p 0.06$). In addition, fewer relapses were found among patients with peroneal involvement [0 (0-0) vs 5 (1-6.7), $p 0.05$], a high white blood cell count at diagnosis ($r -0.569$, $p 0.02$) and those who were not treated with pamidronate [0 (0-5) vs 5 (1.2-6.7), $p 0.07$]. Finally, the lack of sequelae was related to the administration of pamidronate (100% vs 57.1%, $p 0.07$), younger age at diagnosis (years) (9.08 ± 1.4 vs 11 ± 2 , $p 0.07$) and lesser CRP level at diagnosis (mg/L) [2.9 (2.9-2.9) vs 3.8 (2.9-3.8), $p 0.005$].

Conclusion: Advanced cases of NBO, without radiological signs of sclerosis or lysis, were more likely to achieve remission. Elevation of acute phase reactants was related to a better response to treatment and a lower relapse rates, but with a greater probability of sequelae. As described in the literature, bisphosphonates achieve higher rates of clinical and radiological remission. In our study, they are also associated with a lower relapse rates and the lack of sequelae. The last is the main reason to be considered the first treatment choice in NBO.

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SAT0511

CANAKINUMAB IN SYSTEMIC JUVENILE IDIOPATHIC ARTHRITIS: CLINICAL INACTIVE DISEASE RATE AND SAFETY IN ITALIAN PATIENTS

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Background: Systemic juvenile idiopathic arthritis (sJIA) is a polygenic autoinflammatory disease. The innate immune mechanisms play a central role with overproduction of inflammatory cytokines. The increased knowledge on the role of these cytokines has provided a change in the natural history of the disease with the introduction of the targeted treatments. Remarkable results has been observed with canakinumab, an anti-interleukin-1 β monoclonal antibody, in two clinical trials but little information are available in real life.

Objectives: To evaluate clinical inactive disease rate and safety of canakinumab in Italian patients with sJIA.

Methods: We have collected retrospectively clinical and laboratory data of patients with sJIA treated with canakinumab in 9 Italian Pediatric Rheumatology centers. Clinically inactive disease (CID) at 6 months was defined according to Wallace criteria. We analyzed the effect of

canakinumab on fever, rash, number of actives joints, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) and physician's global assessment of disease activity score.

Results: Forty seven patients (26 F) were included in the analyses. The median age (range) at the diagnosis and at the beginning of treatment with canakinumab was 7,6 (1-14.7) and 10,2 (1,7-22,2) years, respectively. Twenty seven patients (57,4%) had been previously treated with other biologic agents (18 with anakinra, 1 with tocilizumab, 6 with both and 2 with etanercept), withdrawn for inefficacy in 15/27 (55,5%). Thirty patients (63,8%) were receiving concomitant treatment with glucocorticoids at the median dose (range) of 0,69 (0,02-2,75) mg/kg/die. Thirty-nine out of 47 patients had > 6 months of follow-up. Among these 39 patients, 27 (69,2%) achieved CID at 6 months and 5/27 (18,5%) were still on glucocorticoids. Of the 30 patients who received concomitant glucocorticoids at baseline, 24 achieved 6 months of follow-up and 12 (50%) of these were able to withdraw glucocorticoids. Minor adverse events were reported in 5/30 (16,6%) patients: upper respiratory tract infections in 4 and transient injection site reaction in 1. No cases of macrophage activation syndrome was reported.

Conclusion: Our results provide initial real world evidence of the efficacy of treatment with canakinumab in patients with sJIA. In our study the percentage of patients who reached CID at 6 months is slightly higher (69,2%) than reported at the end (from 3 months to one year) of the 2 published randomized trials (60%). No serious adverse events were recorded in our population.

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SAT0512

LONG-TERM FOLLOW-UP OF CARDIOVASCULAR OUTCOMES IN KAWASAKI DISEASE. OBSERVATIONAL STUDY FROM A SINGLE CENTER

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Background: Kawasaki disease (KD) is an acute systemic vasculitis of unknown aetiology which can lead to coronary aneurysm (CA) formation in 15-20% of patients. Long-term rates of adverse cardiac events are not well-known.

Objectives: a) to compare demographic, clinical and laboratory features of patients who developed coronary aneurysm with patients who did not. b) to assess long-term cardiovascular outcomes in the subgroup of patients who developed cardiac aneurysms.

Methods: Single center study of 55 patients with KD who were diagnosed between 1994-2009. KD diagnosis was based on the classic classification criteria¹. We considered two groups: a) patients who presented CA at diagnosis. b) patients who did not present CA. Statistical analysis was performed with SPSS. Student's t test or Mann-Whitney U test was used to compare continuous variables, and Chi-squared test or Fisher's exact test for categorical variables as appropriate.

Results: Out of 55 patients with KD, 8 patients (3 men/5 women) presented CA at diagnosis. Differences between the two groups mentioned above are shown in **TABLE 1**. Mean age at diagnosis was lower in patients who presented CA (1.74 vs 3.88 years; $p=0.044$). The duration of symptoms was longer in patients with CA (14.0 vs 12.0 days; $p=0.015$), however there were no qualitative differences in the symptomatology. Regarding laboratory markers, C-reactive protein (CRP) levels were significantly higher in patients who developed CA (17.0 vs 10.8 mg/dL; $p=0.047$). There was also a tendency to higher levels of erythrocyte sedimentation rate (ERS) and higher platelet count. All patients received intravenous immunoglobulin (IVIG) and antiplatelet agents at the time of