

Poster presentation

Open Access

Efficacy and safety of methotrexate treatment of juvenile localized scleroderma

MK Osminina*, NA Geppe, GV Tougarinova, GM Rabieva and YO Kostina

Address: Moscow medical Sechenov Academy, Moscow, Russian Federation

* Corresponding author

from 15th Paediatric Rheumatology European Society (PreS) Congress
London, UK. 14–17 September 2008

Published: 15 September 2008

Pediatric Rheumatology 2008, **6**(Suppl 1):P230 doi:10.1186/1546-0096-6-S1-P230

This abstract is available from: <http://www.ped-rheum.com/content/6/S1/P230>

© 2008 Osminina et al; licensee BioMed Central Ltd.

Our goal is to study the efficacy and safety of MTX in juvenile localized scleroderma (JLS).

Retrospective study of 59 children with JLS from 3 to 17 y (M = 10.3) treated with MTX was performed. Group 1 (n = 18) – received prednisone 0.5 mg/kg for 6 weeks, tapered to 0.1 mg/kg for 12 months + MTX 10 mg/body sq. weekly for 13.7 mo. Group 2 (n = 41) -MTX the same doses and duration. The efficacy was measured in 6 & 12 months using skin score, activity and sclerosis indexes (IA, IS) (1 – 3 points) of skin damage, the safety by clinical & laboratory methods. Group 1 patients had spread linear skin involvement (hemitype), with skin score significantly higher (p < 0.01) than in group 2, where children had mostly local linear skin damage. Previously 9 pts from Group 1, 31 pts from Group 2 received penicillamine (PA) with no effect.

MTX therapy was effective in 73% of children unsuccessfully treated with PA & in 98% of patients received MTX as the first medication. Effect of therapy was significantly better in pts with disease duration less than 6 mo. In Group 1 significant improvement (p < 0.01) in skin score, IA, IS had been already achieved in 6 months of treatment, in Group 2 only in 12 mo. MTX was effective in children with linear skin, periarticular contractures. Nausea was the main adverse effect, in 17% of pts, with no correlation with genetic polymorphisms of methylenetetrahydrofolate reductase.

MTX is effective and safe in linear JLS.

References

1. Weibel L, Sampaio MC, Visentin MT, Howell KJ, Woo P, Harper JI: **Evaluation of methotrexate and corticosteroids for the treatment of localized scleroderma (morphoea) in children.** *Br J Dermatol* 2006, **155**(5):1013-1020.