

Toxicity of low dose Methotrexate in Rheumatoid Arthritis

Michael Weinblatt, *Journal of rheumatology*, 1985

Summary Report of Article

Review of 587 patients found following side effects:

Gastrointestinal (GI) toxicity – 10% reported anorexia, nausea, vomiting, diarrhea, 2.5 % stopped drug due to these side effects and the others had mild cases, doses >25 mg/week were more toxic to GI tract with stomatitis reported in 6% and occurred within 1-5 days after drug administration

Skin – Side effects may develop in low doses with most common reactions: hyperpigmentation, urticaria, and reactivation of ultraviolet light induced erythema
Alopecia has been reported, thinning of hair occurred in 1% of the cases in this review

Renal – rare in low doses used in rheumatoid arthritis

Hematologic – 3% developed a reaction in this review: leucopenia(low white blood cell count) was most common, anemia and thrombocytopenia less common

Reproductive:

Male – has little and no lasting effect on slowly dividing spermatogonial stem cell population. Men previously treated with high doses have produced normal offspring.

Female – Two studies showed no effect on fertility or ovarian function and no congenital defects noted in women previously treated with high doses

Teratogenesis – birth defects noted if administered early in pregnancy

Malignancy – No evidence noted that it causes cancer

Pulmonary – hypersensitivity reaction has been noted with symptoms of cough, fever, and dyspnea

Miscellaneous toxicity – headache, dizziness shortly after drug administration and resolve in a few days