EVALUATION OF THE SIGNIFICANCE OF TNF (TUMOUR NECROSIS FACTOR) ALFA VARIATION IN SUBJECTS WITH ESSENTIAL THROMBOCYTHAEMIA (ET) RECEIVING ANAGRELID/TROMBOREDUCTIN TREATMENT. PRELIMINARY DATA / PILOT STUDY.

M Balea, Dana Georgescu, Mihaela Popescu, Oana Patrinoiu, Meilin Murat, Mihaela Tevet, Viola Popov, Dragan Cornel, Mihai Manole
Clinical Hospital Colentina – Bucharest

Background: We postulate that PDGF (Plateled Derived Growth Factor) could be the link between ET and mielofibrosys that could complicate the evolution of this disease.
Materials and methods: Starting from the observation that PDGF and TNF alfa have a similar influence on fibroblast proliferation rate and activity we have analysed TNF alfa concentration through out the evolution of ET under treatment with ANAGRELID /TROMBOREDUCTIN.
Seven patients newly diagnosticated with ET have been evaluated; the monitored parameters were: the thrombocyte number, ESR, CRP, fibrinogen level, LDH, DD, iron level in parallel with the evaluation of serum TNF alfa concentration. Inclusion criteria for the evaluation of TNF alfa concentration have been normal levels of CRP, fibrinogen, DD, normal iron level and the absence of any recent infection. The level of TNF alfa has been determined at the moment when the diagnostic was made, 30 days after the initiation of therapy, 90 days after the initiation of therapy and later, at six months.
Results: All subjects had high levels of TNF alfa at the moment of diagnostic, with a mean value of 16.1 pg/ml (cut off<8.1 pg/ml). Evaluation at 30 days showed a significant raise in TNF alfa values, with a mean value of 41.5 pg/ml. At 90 days a regression of TNF levels was noted to a mean value of 13.4 pg/ml. There was no correlation between thrombocytes count, LDH values and TNF alfa variation.
Conclusions: The analysed data indicate that TNF alfa is a potential factor that could mediate mielofibrosis. We could not find any correlation between TNF alfa value and the thrombocytes count. In order to establish long term effects of therapy on the TNF alfa levels and secondary mielofibrosis, we need to extend the batch and the follow-up period.