

**EFFECT OF TUMOR NECROSIS FACTOR- α AND INTERLEUKIN-2
ON SPLEEN LYMPHOCYTE MIGRATION IN MOUSE SKIN****J. Sun, Z. Liu, Y. Bi, Z. Guo, T. Hua, Z. Ding**

Department of Anatomy, Shandong Medical University, Jinan, People's Republic of China and
Department of Biological Sciences (ZG), Kent University, Ohio USA

ABSTRACT

Tumor necrosis factor- α (TNF- α) and interleukin-2 (IL-2) are reported to enhance lymphocyte binding to endothelial cells in vitro. We examined these two agents on lymphocyte migration in vivo. Spleen lymphocytes were radiolabeled with tritiated uridine (3H-UR) and then injected IV into mice. Each cytokine (TNF- α or IL-2) or both cytokines were then injected intradermally on the back of mice. The results demonstrated that TNF- α stimulates lymphocyte migration in vivo in dose-dependent fashion. Kinetic analysis demonstrated that migration with TNF- α started at 3h, peaked at 6h, followed by a gradual decline back to baseline at 24h. IL-2, on the other hand, was nearly inactive, and did not augment lymphocyte migration over and above that induced by TNF- α when both cytokines were injected together.