

† *Effect of Tetracycline on the Antibody Response to Different Antigens.* F. PATOČKA, C. JOHN, P. TYKAL, I. MEIEROVÁ, Department of Medical Microbiology and Immunology, Faculty of General Medicine, Charles University, Prague.

Spleen cells from an adult rabbit, after incubation with bacterial antigen in vitro (*Brucella abortus*, 5 bacteria to 1 spleen cell), were administered intraperitoneally to 5-day-old rabbits. Five days' administration of tetracycline (2.5 mg per animal intramuscularly) resulted in a temporary depression of antibody synthesis. Popliteal lymph nodes excised from mice 48 h after injection of phage T2 into their hind paws were cut into fragments and cultivated in vitro. In cultivation of fragments taken from animals to which tetracycline (1 mg per paw for two days) was administered during the phase of induction of antibody synthesis *in vivo*, the formation of neutralizing antibodies was lower than in lymph node fragments obtained from mice which were only immunized. In mice immunized with bacteriophage by injection into their hind paws, tetracycline also partly inhibited the secondary response, if a suitable antigen dose was chosen for primary and secondary stimulation. If sheep red cells were used as antigen and were administered intravenously to mice, three days' intraperitoneal administration of tetracycline (5 mg, 5 mg, 3 mg) depressed the formation of haemagglutinins determined in the serum. The same doses of the antibiotic also reduced the number of cells forming haemolytic antibodies in mouse spleens (measured by the haemolytic plaque test).