Study of phagocytosis changes of neutrophils in pregnancy

Zamani A. R. Pathobiology department, Medicine faculty, Hamadan Medical Sciences University, Hamadan, Iran.
Masoud A. Immunology department, Medicine faculty, Tehran Medical Sciences University, Tehran, Iran.

Abstract

Specific immunity decrease in pregnancy, but nonspecific does not increase. The decreasing of specific immunity more takes place in primary stage of pregnancy while it will be normal at the end stage. These changes do not clear in nonspecific immunity (such as phagocytosis). The studies consist of 45 samples (45 pregnant individuals: 15 in first, 15 in second and 15 in third trimester) and 20 control (nonpregnant individuals). The power of neutrophils in killing of pathogens, producing oxidant materials and light emission measured by a luminometer (chemiluminescence technique). Opsonised yeast stimulated the neutrophils. Results: Phagocytosis increase in first and second trimester, but does not increased in third trimester (p<0.05).

Key words: Chemiluminescence, Phagocytosis, Pregnancy.

Corresponding address:
Zamani, A.R. Pathobiology department, Medicine faculty. Hamadan Medical Sciences University, P.O.Box 65177, Tel 081-56296-8(238), Hamadan, Iran.