

indicate that surviving to EMF-exposure sarcoma cells, manifest a milder malignant phenotype when inoculated to animals in comparison to the non-exposed cells. sarcoma cells sarcoma cells

Key Words: Sarcoma cells, Static electromagnetic fields, radiofrequency waves , resonance, platelet aggregation, metastasis, Wistar rats

Abbreviations : Electromagnetic fields : EMF , Smooth Muscle cells : SMC, Malignant sarcoma cells : MC, SC, Platelets Reach Plasma : PRP , 3,4-benzopyrene : B[a]P.: DMEM , Fetal Bovine serum : FBS , Radio – frequencies : RF, Electron Paramagnetic Resonance : EPR , Electron Spin Resonance : ESR.

Introduction

There is a lot of data dealing with the effects of electromagnetic fields (EMFs) on cells, experimental animals and humans, some of them referred to application of electromagnetic resonance principles(1, 2). Dealing with malignancy , the following main concepts have been expressed, so far, depending on the intensity, frequency and duration of application of the electromagnetic waves : The EMFs may act as co-carcinogens in combination with the initiating carcinogen , especially in experimental animals and the EMFs can exert anticarcinogenic effects, inhibiting the proliferation of malignant cells in vitro as well as decreasing the size of the experimental tumors in vivo (3,4,5,6). The studies on EMFs pro-carcinogenic effects in experimental animals are however, not numerous and it seems that the described methods have a lot of uncertainty (3,4). In comparison, the studies on EMF anticancer effects are abundant and their methodology is well documented (7). It has been also shown, that the