

Sarcoma cell cycle determination. The preserved in liquid nitrogen EMF and control cells were defrost and subcultured until confluence. Twelve plates were then seeded with the same number of these sarcoma cells and incubated for 24 hours. The EMF cells were exposed to EMFs as before, after 24 h and 48 hours respectively. Six hours after the last session, samples from each plate were taken for testing in a Bexton Dickinson flow cytometer. Cell samples were also tested for their ability to aggregate human platelets by an Aggregometer (CRONOLOG ,CA-500).

Estimation of platelet aggregation ability of sarcoma cells. The “metastatic potential” of sarcoma cells was determined from their ability to aggregate platelets before and after their exposure to electromagnetic fields. A total of 120 tests were performed in blood samples withdrawn from six healthy volunteer donors , free from drugs or alcohol for about ten days before tests. The tests on platelet aggregation were performed in platelet rich plasma (PRP) of the donors, prepared according to the manual of the apparatus. The CRONOLOG kit was used to verify the normal functional responses of platelets via the three aggregation pathways. Platelet activation and aggregation tests were performed after suspension in human PRPs of 500,000 of EMF-exposed or unexposed sarcoma cells .

Animal studies: Two groups of male Wistar rats , 3 months old, 250+/- 15 g, b.w, were used in order to estimate the malignant potncy of unexposed and exposed sarcoma cells, in vivo, as follows:

- a). **Control Group (CG) :** consisted of 10 Wistar rats which were inoculated by 4×10^6 unexposed to EMF sarcoma cells,each. .
- b). **Experimental Group (EG):** 10 Wistar rats were inoculated by 4×10^6 sarcoma cells exposed to the previously described EMF.