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Conferencia

por

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título

"Dose-response study for the highly aggressive and metastatic primary F3II mammary carcinoma under direct current"

Abstract

Electrochemical treatment has been suggested as an effective alternative to local cancer therapy. Nevertheless, its effectiveness decreases when highly aggressive primary tumors are treated. The aim of this research was to understand the growth kinetics of the highly aggressive and metastatic primary F3II tumor growing in male and female BALB/c/Cenp mice under electrochemical treatment. Different amounts of electric charge (6, 9, and 18 C) were used. Two electrodes were inserted into the base, perpendicular to the tumor's long axis, keeping about 1 cm distance between them. Results have shown that the F3II tumor is highly sensitive to direct current. The overall effectiveness (complete response partial response) of this physical agent was $\geq 75.0\%$ and observed in 59.3% (16/27) of treated F3II tumors. Complete remission of treated tumors was observed in 22.2% (6/27). An unexpected result was the death of 11 direct current-treated animals (eight females and three males). It is concluded that direct current may be addressed to significantly affect highly aggressive and metastatic primary tumor growth kinetics, including the tumor complete response.

Fecha: Jueves, 29 de noviembre de 2018

Hora: 12:00 horas

Lugar: Aula 13, Edificio de Matemáticas, 1ª planta