THE ELECTRO-CAPACITIVE CANCER THERAPY (ECTT) AS ADJUVANT THERAPY FOR ADVANCED STAGE NASOPHARYNGEAL CARCINOMA

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Background

The Electro-Capacitive Cancer Therapy (ECTT) is a low electric energy device which can be used as a supporting modality to hold the growth of cancer cells. ECTT has been investigated and proven to be able to kill cancer cells in vitro, but no single study about it in nasopharyngeal carcinoma (NPC). This study was conducted to determine the safety and usefulness of ECTT as adjuvant therapy for advanced NPC.

Materials and Methods

NPC Patients who came to ORLHNS OPD Dr. Soetomo Hospital
Randomized samples
Group Study (n=9) Chemotherapy (Cisplatin + Paclitaxel) & ECTT 15 minutes
Group Control (n=9) Chemotherapy (Cisplatin + Paclitaxel)
Evaluation: Pre & Post (After 50 days) Assessment of Quality of Life with EORTC QLQ-C-30, Primary Volume Tumor, Audiometry & OAE, ECG, EEG

Results & Discussion

Designing

Designing of ECTT devices for patients. The energy of power supply come from a rechargeable battery, this electric current is a circuit, that is produces 6-20 volt AC electric current with frequency of 50-500 Khz. Vest and headgear for cancer treatment of NPC.

Conclusion

The ECTT was safe to be administered to advanced NPC patients, but did not provide usefulness as adjuvant therapy.

Limitation & Suggestion

Research limitation of this study are the measurement of primary volume tumor of NPC patients at Dr. Soetomo Hospital, because limitations of tools and insufficient application at the time of this research.

There was no difference in quality of life between the ECTT treatment group and the control group. Further research is needed to determine the effectiveness of ECTT in the treatment of nasopharyngeal carcinoma.

References: