946 DEVELOPMENT OF LIKE-DTH SYNDROM AS AN INDICATOR OF EFFICACY OF THE SHORT CULTURE OF DENDRITIC CELLS PULSED WITH LYSE OF CIRCULATING TUMOR CELLS

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Background Adaptive dendritic cell immunotherapy in cancer patients has been shown to be effective in activating the immune system to fight tumors.[1 2]

There are multiple publications where a significant variety is demonstrated in the methods used for its in vitro manufacture. A reliable and easy-to-evaluate sign is the appearance of a DTH-like (delayed type hypersensitivity skin test (Like DTH)lesion at the vaccine application site. The diameter of this lesion is directly related to the clinical response, the larger the diameter observed, the better the result.

Our work consists of demonstrating that the manufacture of immunotherapy with pulsed dendritic cells with circulating tumor cell lysates produces a DTH of greater dimension, without the need to introduce non-autologous products to the vaccine, thus maintaining the exclusive autologous product.

Methods 3 patients were evaluated: A 59-year-old female patient with a diagnosis of gastric cancer without previous treatment with chemotherapy or radiotherapy, underwent partial gastrectomy in 2019. 64-year-old female patient diagnosed with metastatic ovarian cancer and the third 46-year-old female patient diagnosed with metastatic breast cancer. After obtaining informed consent, 160 ml of peripheral blood were collected of each one and sent to the laboratory to process the vaccine with dendritic cells. monocyte-derived CD-14 pulsed with CD-326 for gastric cancer, CD-ErbB-2 for ovarian and breast cancer circulating tumor cell lyses.

The final product was divided into 3 vaccines and applied every 72 hr in the infrainguinal region.

Results The application of the vaccines was carried out subdermally 10 cm below the inguinal region, the total volume per vaccine was 10 ml, the development of DTH occurred 9 hours after the application of the second and third vaccine.

figures 1–3 show the DTH developed is shown at the time of the application of the 3rd vaccine. The patients did not develop local symptoms at the DTH site, only one patient presented chills.

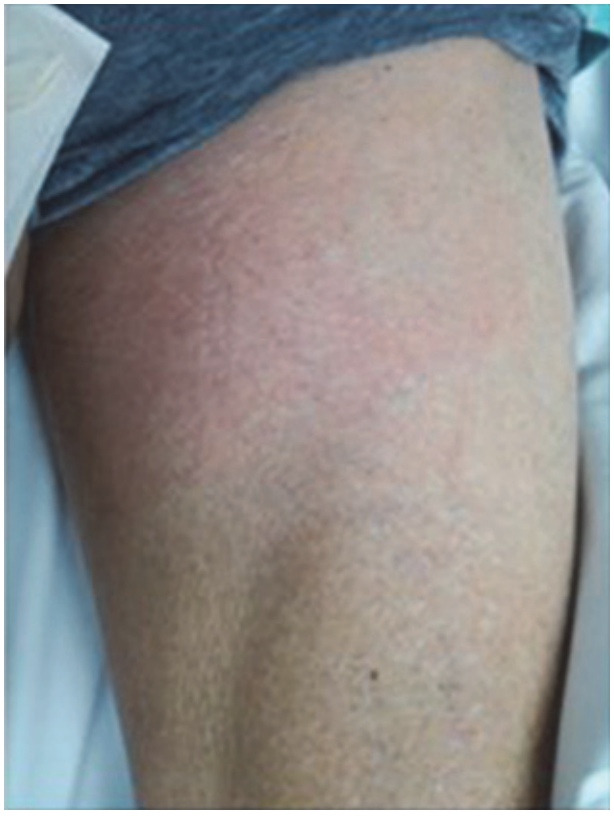
Conclusions The use of circulating tumor cell lysates is effective in activating the immune system against specific antigen measured through the development of DTH without the need for the use of synthetic adjuvants.

The effectiveness in reducing the amount of circulating tumor cells may be directly proportional to the effect of the pulsed vaccine with their lysate.

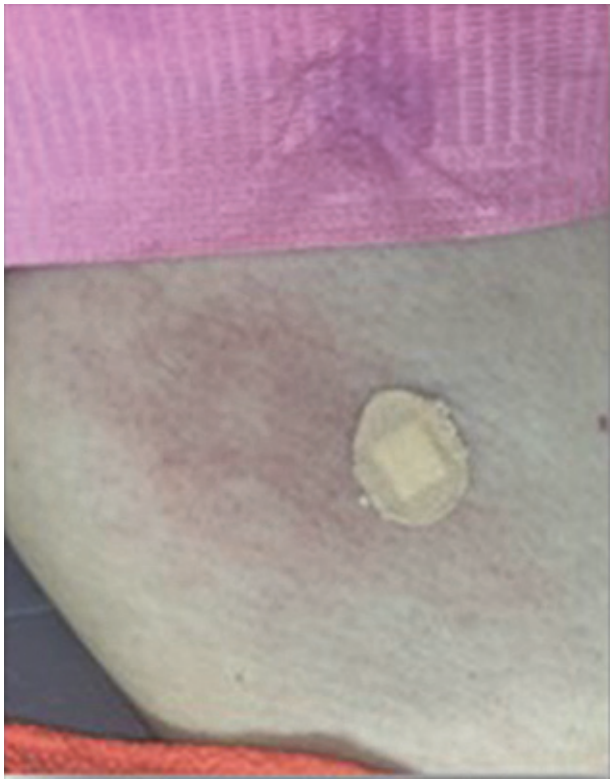
The procedure turned out to be safe for the patient, with no significant side effects.

REFERENCES

1. Anna-K Thomas-Kaskel1, Robert Zeiser1, Rosa Jochim, *et al.* Vaccination of advanced prostate cancer patients with PSCA and PSApeptide-loaded dendritic cells induces DTH responses that correlate withsuperior overall survival. *Int. J. Cancer* 2006;**119**:2428–2434.
2. EHJG Aarntzen, CG Figdor, GJ Adema, CJA Punt, IJM de Vries. Dendritic cell vaccination and immune monitoring. *Cancer Immunol Immunother* 2008;**57**:1559–1568.



Abstract 946 Figure 1 Metastatic ovarian cancer patient, DTH de 29 cm



Abstract 946 Figure 2 Patient with gastric cancer, DTH 18 cm

Abstract 946 Figure 3 Metastatic breast cancer patient, DTH de 26 cm

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