# Thymostimuline and uterine cancer satellite lymph nodes. Morphometric comparison between an 8-day-before-surgery and a 14-day-before-surgery single treatment

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Summary: The Authors analyse the functional areas (cortical, paracortical, germinal center, medullary, histiocytosis of the sinuses) of regional lymph nodes in women having uterine carcinoma and previously treated with Thymostimuline, and who were operated on respectively 8 and 14 days after inoculation. They also evaluate the degree of significance when compared with a control group treated locally with a physiological solution. The number of lymph nodes examined is at least 5, and the stereological analysis was carried out with the use of a grid: 200 points, actual area 200 cm², effective area at the level of the preparation 0.32 mm² (250 X).

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The Authors examine the results obtained after 8 days' action by Thymostimuline, and, after 14 days, the difference between the 8-day-after and the 14-day-after administration results, and those between the cervical and the endometrial.

4 women with uterine cancer (Stages I and II) and treated with the same doses of physiological saline solution were used as controls.

Key words: cervical carcinoma; endometrial carcinoma; thymostimuline; lymph nodes.

#### INTRODUCTION

In the present study we have quantitatively analyzed the functional areas (cortical, medullary, paracortical, breast histiocytic, germinal centers) of the regional lymph nodes of women who were carriers of squamous cell cervical (27 cases) and endometrial carcinoma (10 cases) at Stage I, and treated locally with a Tp-1 dose. As a control, 4 women who were carriers of stage I cervical and endome-

trial carcinoma were treated locally with a physiological solution.

### MATERIAL AND METHODS

The patients were subdivided into two groups:

a) Hysterectomy after 8 days from the Tp-1 inoculation (15 cases of cervical cancer and 6 cases of endometrial cancer).

b) Hysterectomy after 14 days from the Tp-1 inoculation (12 cases of cervical carcinoma and 4 cases of endometrial carcinoma).

Stereological analysis was carried out by means of a grid (200 points, actual area 200 cm<sup>2</sup>; effective area of the preparation 0.32 mm<sup>2</sup> (250 x). The number of lymph nodes examined was at least 5 per case; metastatic lymph nodes were excluded from the study. Significance between the groups was evaluated by the Student's T test, adopting p < 0.05 as a limit.

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Percentage distribution of the various components examined and relative standard variation (8 days).

	Portio	Endometrium	Control
CG	$1.22 \pm 1.791$	$2.3 \pm 0.383$	$0.43 \pm 0.535$
С	$4.47 \pm 3.377$	6.37 ± 5.269	$7.9 \pm 5.194$
PC	$62.55 \pm 11.886$	$56.65 \pm 16.806$	$13.77 \pm 3.457$
M	$5.6 \pm 9.459$	$6.05 \pm 5.963$	$36.42 \pm 9.904$
HS	$25.1 \pm 6.112$	$22.2 \pm 6.21$	$22.62 \pm 39.775$

Percentage distribution of the various components examined and relative standard variation (14 days).

	Portio	Endometrium	Control
CG	$1.06 \pm 2.48$	$0.81 \pm 1.21$	1.4± 1.11
C	$23.6 \pm 7.81$	$12.6 \pm 5.55$	$39.1 \pm 20.12$
PC	$34.5 \pm 8.22$	$43.8 \pm 9.14$	$16 \pm 7.31$
M	$10.6 \pm 5.14$	$9.4 \pm 5.41$	$10 \pm 10.22$
HS	$27.5 \pm 6.83$	$32.4 \pm 8.21$	$31.4 \pm 19.14$

Student's T test. Portio versus endometrium.

Functional area	Student's test	Significance
Germinal centre (CG)	-1.44	N.S.
Cortical (C)	-9.92	P < 0.001
Paracortical (PC)	0.91	N.S.
Medullary (M)	-0.11	N.S.
Histiocytosis of the sinuses (HS)	9.78	P<0.001

Student's T test. Endometrium versus control.

Functional area	Student's test	Significance
Germinal centre (CG)	6.5	P<0.001
Cortical (C)	-0.45	N.S.
Paracortical (PC)	4.94	P < 0.005
Medullary (M)	-6.12	P < 0.001
Histiocytosis of the sinuses (HS)	-2.62	P<0.05

#### RESULTS

- 1) Patients hysterectomized after 8 days:
- a) the germinal, paracortical and medullar centers in the cervical carcinomalymph nodes were markedly different to those of control;

- b) the germinal, paracortical and medullar centers in the endometrial carcinomalymph nodes were markedly different to those of control.
- 2) Patients hysterectomized after 14 days:
- a) there was a marked difference between the cortical and the paracortical areas of the cervical carcinoma cases when compared to the controls:
- b) there was a marked difference between the paracortical and the medullar areas of endometrial carcinoma cases when compared to controls.

The results obtained lead to the following conclusions:

- 1) the action of the drug is present 15 days after surgery, although less than it is after 8 days;
- 2) the phenomenon is statistically significant compared to those not treated;
- 3) in our view, it is good for the immunostimulation to be present in the postoperative period in gynaecological oncology.

Indeed it has proved to be sure and strengthening.

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