CORRELATION BETWEEN BMI AND CHEMOTHERAPY RELATED AMENORRHEA (CRA) IN PREMENOPAUSAL BREAST CANCER (PBC) PATIENTS TREATED WITH ADJUVANT ANTHRACYCLINE-CYCLOPHOSPHAMIDE (AC) AND DOCETAXEL (T)

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Background:
Amenorrhea is a frequent side-effect of chemotherapy (CT) that may reduce fertility, cause sexual dysfunction, bone loss and menopausal symptoms. In this retrospective study we analyzed incidence of CRA in PBC patients and correlation between their BMI and disappearance of menstrual cycle (MC).

Methods:
24 PBC patients, 43 median age years, treated with adjuvant AC±T. BMI was evaluated in all women. Overall population (OP) had regular MC and nobody began hormone therapy, at the same time.

Results:
10 patients received AC and 14 patients received TAC. In 22 patients amenorrhea appeared during CT: 90% treated with AC vs 93% with TAC. In 82% of OP amenorrhea appeared during first three cycles of CT. CRA occurred within first two doses of treatment in 14/22 patients: 66.7% treated with AC vs 62% with TAC. MC reappeared at the end of CT in 32% of patients, with a median age of 40 years. In OP, 58% has BMI<24.9 and 42% has BMI>25. AC group: 7 patients have BMI<24.9 (83% experienced amenorrhea) vs 3 patients with BMI>25 (100% experienced amenorrhea); MC reappeared in 1 pt with BMI<24.9. TAC group: 7 patients have BMI<24.9 (86% experienced amenorrhea) vs 7 patients have BMI>25 (100% experienced amenorrhea); MC reappeared in 3 patients (1 patient with BMI<24.9; 2 patients with BMI>25).

Conclusions:
In our study CRA occurs frequently and there were no differences between subgroups undergoing to AC±T. In younger patients MC reappeared at end of CT. There is no correlation between BMI and occurrence of amenorrhea.