

Persistent significant alopecia (PSA) from adjuvant docetaxel after doxorubicin/cyclophosphamide (AC) chemotherapy in women with breast cancer.

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Significant advances in the prevention of metastases in women with localized breast cancer have been accomplished over the past 15 years. Likewise, advances in the management of side effects and toxicities such as nausea/vomiting and cytopenias, have been just as impressive. Unfortunately, the one side effect possibly most dreaded by the patient is alopecia. Yet, we have always told our female patients don't worry, it will always come back. This last statement may not be true.

#### Materials

Methods: Consecutive patients treated by the author from 1/94 through 12/04 (11 years) with adjuvant chemotherapy were reviewed. Group A- doxorubicin regimen without a taxane (AC, FAC, A/CMF). Group B- doxorubicin plus paclitaxel (AC/T, AT/T, AC/T dose dense, ATC, AC/THerceptin). Group C- doxorubicin plus docetaxel (AC/Tax, ATax, ACTax, AC/TaxXeloda, AC/TaxHerceptin, ATax/CAF, CAF/Tax). Women who underwent high-dose chemotherapy with stem cell rescue were excluded. Only patients with at least one year of follow-up post adjuvant chemotherapy were included. The average time from the last dose of chemotherapy was 48 months (range 19-85 months). PSA was defined as hair regrowth less than 50% of the pre-chemotherapy amount of hair as judged by both the patient and the author.

#### Results:

7 Women developing PSA  
Group A 0/258 0%  
Group B 0/126 0%  
Group C 7/112 6.3%

All 7 of these women with PSA had received AC X 4 (60/600 mg/m<sup>2</sup>) every 3 weeks followed by docetaxel (100 mg/m<sup>2</sup>) every 3 weeks. Two patients discontinued the docetaxel after only one dose due to unacceptable toxicity, while the other 5 received all 4 planned doses. Most of the patients with PSA would describe their hair as male pattern baldness and are wearing wigs.

Discussion: It appears from this data set, that when docetaxel is administered after 4 doses of AC, there is a small but significant possibility of poor hair regrowth lasting up to 7 years. Such an emotionally devastating long term toxicity from this combination must be taken into account when deciding on adjuvant chemotherapy programs in women who likely will be cured of their breast cancer.