



Administering docetaxel, doxorubicin, and cyclophosphamide as a neoadjuvant treatment may decrease lymphedema risk in breast cancer patients

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To the Editor,

I wish to congratulate Hidding and their colleagues [1] in which they investigated the incidence of lymphedema in patients with breast cancer during and after adjuvant treatment with docetaxel, doxorubicin, and cyclophosphamide (TAC) and identified predictors for development of lymphedema. They found that axillary lymph node dissection was predictive for development of lymphedema. The association of taxanes with the development of peripheral edema was reported previously. Taxanes may cause systemic disruption, which could have a longer-term effect on lymphatic function leading to lymphedema in breast cancer patients. Furthermore, Cariate and their colleagues in their hypothesis-generating study investigated risk factors for lymphedema with a specific focus on the potential impact of chemotherapy. They found that patients who received adjuvant taxanes were nearly three times more likely to develop lymphedema than patients who had no chemotherapy. Interestingly, no such increase was observed when taxanes were administered in the neoadjuvant setting. Authors suggested that taxane may be used in a neoadjuvant setting rather than adjuvant setting [2]. In conclusion,

giving TAC regimen as a neoadjuvant treatment instead of adjuvant treatment may decrease risk of lymphedema. This proposal needs to be validated in further trials.

Compliance with ethical standards

Conflict of interest The author declares that he has no conflict of interest.

References

1. Hidding JT, Beurskens CHG, van der Wees PJ, Bos WCAM, Nijhuis-van d, Sanden MWG, van Laarhoven HWM (2017) Changes in volume and incidence of lymphedema during and after treatment with docetaxel, doxorubicin, and cyclophosphamide (TAC) in patients with breast cancer. *Support Care Cancer*. <https://doi.org/10.1007/s00520-017-3907-1>. [Epub ahead of print]
2. Cariati M, Bains SK, Grootendorst MR, Suyoi A, Peters AM, Mortimer P, Ellis P, Harries M, van Hemelrijck M, Purushotham AD (2015) Adjuvant taxanes and the development of breast cancer-related arm lymphoedema. *Br J Surg* 102:1071–1078. <https://doi.org/10.1002/bjs.9846>

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