Canalicular Stenosis as the Underlying Mechanism for Epiphora in Patients Receiving Weekly Docetaxel
Bita Esmaeli and Gabriel N. Hortobagyi

*The Oncologist* 2001, 6:551-552.
doi: 10.1634/theoncologist.6-6-551

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://theoncologist.alphamedpress.org/content/6/6/551
Weekly administration of docetaxel has emerged as a valuable alternative to an every-3-weeks administration of this drug for treatment of metastatic breast cancer. Baselga and Tabernero should be commended on their informative review of the advantages and side effects of weekly docetaxel administration [1]. The authors state that “a new toxicity of frequent tearing and visual problems, which is generally mild and manageable, may also occur” with weekly administration of docetaxel [1]. Epiphora (excessive tearing) has been reported in up to 50% of patients receiving weekly docetaxel [2]. We believe it is prudent for the readers of The Oncologist to be aware of the mechanism for epiphora in patients receiving weekly docetaxel. We have identified anatomic narrowing of the canaliculi (the first portion of the tear drainage apparatus) as the underlying mechanism for epiphora in at least 23 patients who received weekly docetaxel at 35-40 mg/m²[3-6]. We have found that this side effect is much more common with weekly administration of docetaxel than with an every-3-weeks administration of this drug and does not respond to conservative measures such as administration of topical steroids or artificial tears [4]. The usual interval between initiation of weekly docetaxel and onset of epiphora is 12 to 16 weeks (with a 3 weeks on, 1 week off schedule of administration). In our experience, most patients who suffer from epiphora are quite bothered by it and believe it significantly affects their quality of life. They report difficulty with reading and driving and dislike the mistaken perception that their tears are due to emotion.

It is important for oncologists to recognize canalicular stenosis as the underlying mechanism for epiphora in patients receiving weekly docetaxel so that consideration can be given to surgical insertion of silicone stents in the nasolacrimal ducts early in the course of chemotherapy. A delay in diagnosis of this side effect can lead to permanent closure of the canaliculi. Once the canaliculi are narrowed to the extent that silicone stents cannot be inserted, a conjunctivodacryocystorhinostomy with placement of a permanent Pyrex glass tube is required to overcome the blockage of the lacrimal outflow. We recommend that patients receiving weekly docetaxel undergo monthly examinations by an ophthalmologist starting as early as possible after initiation of weekly docetaxel so that silicone intubation can be considered as soon as any symptoms of epiphora are noted by the patient. Future prospective studies should focus on determining the frequency and timing of this side effect secondary to various schedules of administration of docetaxel and other taxanes.


