Ocular Changes With Oxaliplatin

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Ocular toxicity, although uncommon, can occur with many chemotherapeutic agents. Platinum compounds have been documented to produce a variety of ocular side effects, and reports have been made of ocular toxicity with oxaliplatin. This article reports on four patients who experienced ocular symptoms while receiving oxaliplatin. The symptoms included tunnel vision and visual loss with postural changes. One patient had objective findings that included papilledema. All of the changes were reversible. Oxaliplatin will continue to be used widely, so clinicians treating patients with it must be alert for unusual toxicities such as those described in this article.

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Pathophysiology

Vision can be affected in a variety of ways. In addition to trauma, infection, and exposure to foreign objects or chemicals, diseases intrinsic to the eyes such as glaucoma and cataracts can impact vision. Neurologic diseases affecting the areas of the brain that are devoted to vision can produce eye symptoms as well. Genetic disorders and acquired diseases often affect the eyes. Finally, eyes can be affected by medications (Fauci et al., 1998). For example, Pavan-Langston (1996) listed potential ocular toxicities for many classes of drugs. Allopurinol can cause retinal hemorrhages, papilledema, and diplopia, among other toxicities (Pavan-Langston). The cephalosporins have been associated with color vision defects and visual hallucinations (Pavan-Langston). Likewise, narcotics can cause visual hallucinations as well as dry eyes and myopia (Pavan-Langston). They are agents commonly used in the care of patients with cancer and, therefore, warrant attention.

Side effects of medications affecting the eyes can occur from systemic treatments and treatments for local, ophthalmic problems. The adverse effects vary from mild and transient to severe

At a Glance

✦ Ocular toxicity, although uncommon, can occur with many chemotherapeutic agents.
✦ A variety of ocular changes have been seen with platinum compounds. Ocular toxicity also has been reported with oxaliplatin.
✦ With any new agents, healthcare professionals must be alert to unusual toxicities that may not have been noted in clinical trials.