Carboplatin Hypersensitivity Reactions

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Carboplatin is used widely to treat cancers such as lung, breast, and ovarian. Hypersensitivity reactions (HSRs) to carboplatin can occur, often after numerous doses. The reactions can range from mild to life-threatening. Oncology nurses witness the reactions and are instrumental in providing interventions to assist patients. Symptoms include flushing, rashes, itchy palms, nausea, difficulty breathing, back pain, hypotension, and tachycardia. Interventions include support of patients with oxygen and IV hydration along with administration of certain medications to diffuse HSRs. Predictive measures may include skin testing on patients who have received more than seven total doses of carboplatin. Desensitization protocols may be useful for patients with positive skin tests. Ultimately, with the potential for life-threatening reactions, patients and physicians need to consider the risk-to-benefit ratio of using the drug.

At a Glance

✦ Carboplatin hypersensitivity reactions (HSRs) often occur after numerous doses.
✦ HSRs often are unexpected and can be mild to life threatening.
✦ Ways to predict and prevent HSRs include skin testing, premedication, and dilution regimens.

As cetuximab and bevacizumab also have the potential. With this known hypersensitivity potential, nurses are aware of, plan for, and take action to decrease such risk. Action includes administrating premedications such as diphenhydramine and dexamethasone, slowing initial rates of infusion, and monitoring patients closely for signs and symptoms of HSRs.

Unexpected HSRs often are frightening to nurses and patients when they occur. As seen in the case study, carboplatin HSRs can occur without warning after numerous doses. In fact, that is a defining characteristic of carboplatin HSRs. Because of the unpredictable nature of carboplatin HSRs, many nurses and patients are unprepared when they occur. When reactions occur days after infusion, nurses may miss

Review of Hypersensitivity Reactions

Nurses often administer chemotherapy drugs that have potential for HSRs. Drugs such as paclitaxel, rituximab, and bleomycin sulfate are known for their risks of HSRs. Newer agents such as cetuximab and bevacizumab also have the potential. With this known hypersensitivity potential, nurses are aware of, plan for, and take action to decrease such risk. Action includes administrating premedications such as diphenhydramine and dexamethasone, slowing initial rates of infusion, and monitoring patients closely for signs and symptoms of HSRs.

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