

Rapid inpatient/outpatient desensitization for chemotherapy hypersensitivity: Standard protocol effective in 57 patients for 255 courses[☆]

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Objectives.

Hypersensitivity reactions (HR) to chemotherapy often prompt permanent discontinuation and deprive the patient of the most active regimen. We investigated the safety and effectiveness of a rapid desensitization protocol used in inpatient and outpatient settings for patients with HR to various chemotherapy and related agents.

Methods.

A 3-solution, 12-step protocol delivered doubling drug doses by step, infusing the target dose over 5.8 h for inpatient and 3.8 h for outpatient administration.

Results.

57 consecutive patients who had moderate to severe HR to chemotherapy were evaluated for desensitization. All 57 patients successfully completed 255 courses of desensitization (127 to carboplatin, 114 to paclitaxel, and 14 to four other agents) where 16 patients received 51 courses in the outpatient setting (34 to carboplatin and 17 to paclitaxel). 225 courses (88.2%) were completed without any HR. 18 patients had breakthrough symptoms (BS) over 30 courses (11.8%) that were less severe than their initial HR. After management of breakthrough symptoms, these patients finished all 30 courses and tolerated subsequent desensitizations on a modified protocol. 21 of 26 patients (81%) with HR to carboplatin had positive skin tests to carboplatin. Cancer response to chemotherapy administered by desensitization was within the expected range after 1–3 years of follow-up.

Conclusion.

The rapid desensitization protocol was safe and effective in both the inpatient and outpatient settings and allowed appropriate patients with moderate to severe HR to continue chemotherapy. This study warrants the incorporation of the protocol into standard clinical practice.