

Hypersensitivity reactions to chemotherapy: so... what do we do now?

Briegas Morera, D¹; Santos Hurtado, I¹; Pérez Calderón, P²; Bravo García - Cuevas, LM¹; Bonilla Galán, C¹; Meneses Mangas, C¹; Romero Soria, L¹; Martín Clavo, S¹; Rangel Mayoral, JF¹.

¹Servicio de Farmacia. ²Servicio de Alergología. C. Hosp. Univ. Badajoz. Avda. de Elvas, S/N. 06006 Badajoz (Spain)

Background

Despite using immunosuppressant premedication before administering chemotherapy with high allergenic potential (taxanes, platinum drugs, biological macromolecules...), some patients get sensitized along first cycles and tend to develop hypersensitivity reactions. This lead to an early treatment interruption, which could be critical for patient's outcome. Once identified, the allergen could be readministered under a desensitization protocol, inducing a tolerance state in which the patient doesn't react again. During each session, the whole dose is administered starting at a very low infusion rate, which raises periodically until reaching the regular one. Patients with positive skin test, severe reaction despite negative test, and those who react again during controlled administration are candidates for desensitization.

Purpose

To describe management and outcomes of patients who reacted to chemotherapy, and how oncologists change their prescriptions having on account the available options.

Material & Methods

We carried a retrospective study (period 2011-2014), obtaining data from patients' clinical histories and chemotherapy registry. SPSS20 was used for data coding and statistical processing.

Results

Sixteen patients (81.2% female, average 62.947.3 years, ovarian cancer as mode diagnosis) experienced mild (9), moderate (3) or severe (4) hypersensitivity reactions to chemotherapy (68.8% platinum drugs). Five patients had positive skin test; only 3 enrolled desensitization programs, the remaining two switched treatment line. Two patients had severe reaction but negative test, one of them enrolled and the other switched treatment. The remaining nine (negative test, mild-moderate reaction) didn't experienced a second reaction during controlled infusion, so they kept receiving treatment; just one of them reacted and was proposed for the program. Four desensitizations were carried without incidences, the remaining had to be stopped due to a reaction when infusion reached top rate along first session.

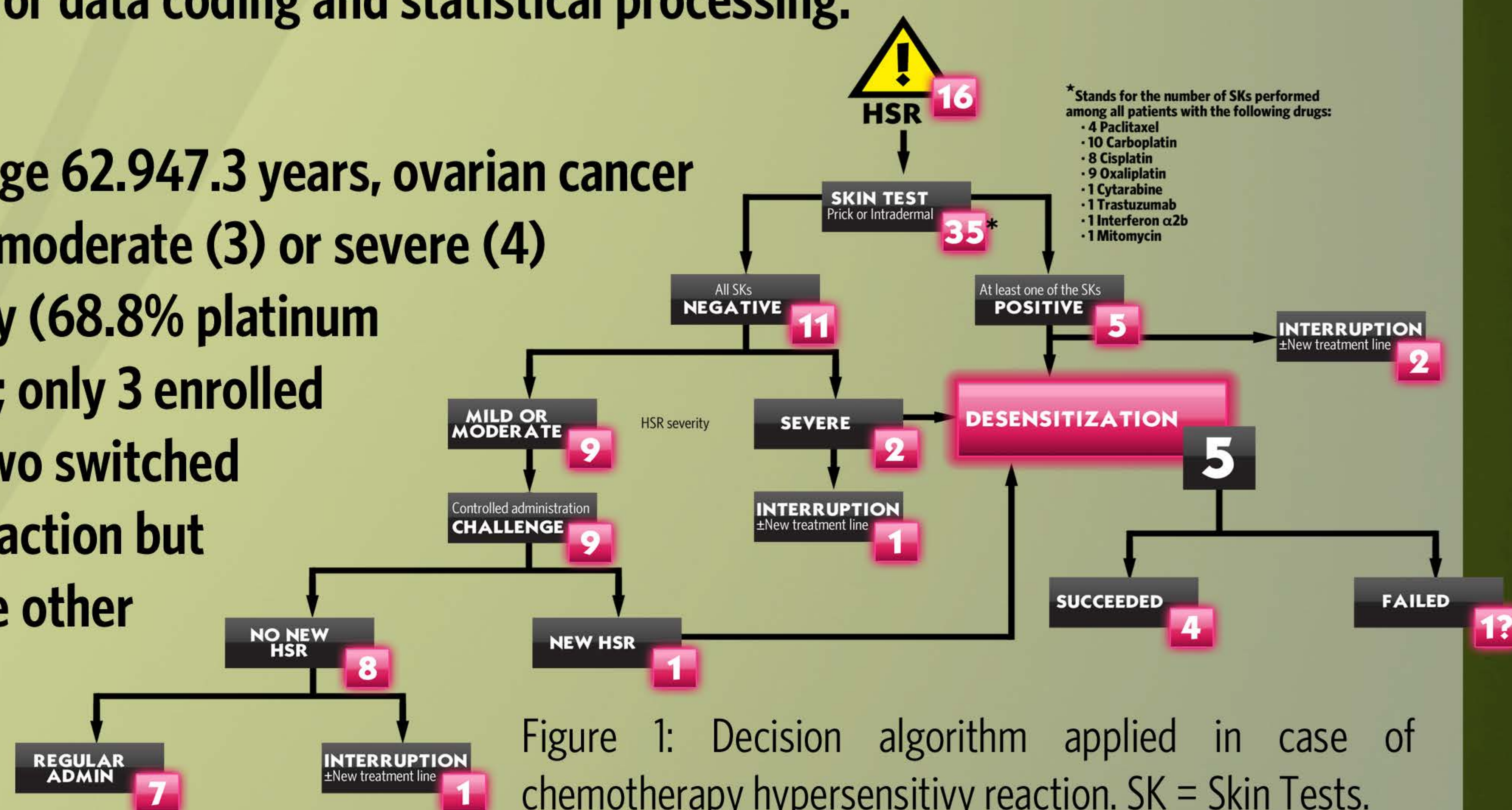


Figure 1: Decision algorithm applied in case of chemotherapy hypersensitivity reaction. SK = Skin Tests.

Conclusions

Desensitization, provided by Drug Allergy and Hospital Pharmacy departments, allows to exploit capital treatment lines, modifying oncologists decisions and improving patient outcomes.