

103 Adverse Reactions during Desensitization to Chemotherapy Agents



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RATIONALE: Drug desensitization is very useful to continue treatment with first-line chemotherapy agents in allergic patients. The introduction of new phenotypes of hypersensitivity reactions has influenced the handling of these reactions.

The objective of this research was to report the type of the hypersensitivity reactions observed during desensitization to these agents in the General University Hospital of Alicante from April to August 2018.

METHODS: The phenotype of the hypersensitivity reactions was established according to the clinical characteristics, the result of the skin tests and the biomarkers (tryptase and IL-6) at the time of the reaction, and they were also classified according to their severity.

RESULTS: We observed 4/42 (9.5%) hypersensitivity reactions in 3 patients. The first patient, with prior grade II reaction to Oxaliplatin, phenotype 1, during the desensitization presented a similar grade II reaction, which required only intravenous chlorpheniramine. Three patients presented reactions of the Cytokine Release Phenotype: a patient with a previous grade II reaction to Paclitaxel, who during the desensitization presented a similar grade I reaction, which was treated with acetylsalicylic acid (ASA) orally. Another patient with a previous grade III reaction to Docetaxel, reacted during two desensitizations, both grade II, Cytokine Release Phenotype, resolved with fluids, ASA, montelukast, and intravenous opioids.

CONCLUSIONS: The reactions to chemotherapy during desensitization are usually of the same phenotype as those of the initial reaction, their proper identification allows to anticipate the treatment to be used in case of reactions.

104 Current Practice Of The Diagnosis Of Drug Allergy In Korea



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RATIONALE: Different languages of the researchers from all over the world prevent rare cases of drug allergy to be shared with other researchers. We conducted a literature review on the diagnosis of drug allergy from Korean journals to evaluate the current practice on the diagnosis of drug allergy in Korea. We especially focused on finding literature in the Korean language in order to share our data with researchers from other countries.

METHODS: We searched KoreaMed.org which was a search engine for Korean journals. After reviews, the articles which described drug allergy diagnosis procedure well were selected. For drug skin tests, papers which described the concentration of the drugs and the results from the healthy controls were considered to have adequate quality. For drug provocation tests, papers which contained information on the starting dose and interval between doses were selected.

RESULTS: There were only 15 and 24 articles from 632 searched with adequate quality on drug skin test and drug provocation test procedure, respectively. Clinical diagnosis of most cases was drug-induced anaphylaxis. The numbers of healthy control used in drug skin tests were from 3 to 27 people. The starting dose of drug provocation tests was between one-eighth of usual dose and one usual dose. When there was positive drug

provocation reaction, the reaction usually occurred within twice the time that the initial reaction taken.

CONCLUSIONS: There was quite a lot of valuable information on the drug allergy diagnosis in Korean journals.

105 Red Meat Allergy May Develop Independent of Tick Blood Meal Status



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RATIONALE: Alpha-gal syndrome (AGS) is a paradigm-shifting food allergy characterized by delayed reactions to non-primate mammalian meat and derived products. Evidence continues to suggest that AGS develops following tick bites and multiple species have been implicated globally. Tick saliva may contain alpha-gal from prior blood meal or may act as an adjuvant to induce IgE. This study assessed whether tick salivary gland extract (TSGE) could activate alpha-gal-sensitized basophils directly and if IgE reactivity was present in tick saliva.

METHODS: PBMCs containing basophils from a non-alpha-gal allergic control subject were stripped of IgE; primed with plasma from subjects with and without alpha-gal allergy; stimulated for 30 minutes with TSGE from 4 species of ticks; and assessed for basophil activation by FACS. IgE reactivity was assessed by immunoassay using TSGE, tick larvae extract and tick saliva.

RESULTS: The frequency of CD63+ basophils was 40-fold higher when alpha-gal IgE-sensitized basophils were stimulated with TSGE from Lone Star ticks compared to baseline. Extract from *Ixodes scapularis* but not the Gulf Coast tick, *Amblyomma maculatum*, also increased basophil activation. IgE reactivity was found in tick saliva (mean 23.4 IU/mL ± 1.9) among subjects with AGS but not larval tick or partially fed TSGE.

CONCLUSIONS: IgE from subjects with AGS recognizes an antigen present in ticks from some species but not all and this observation can lead to identification of the sensitizing allergen. Interestingly, IgE reactivity appears to be specifically retained in tick saliva, an important distinction that may suggest alpha-gal antigen is present in ticks independent of blood meal status.