Safety of an ultra-rush subcutaneous immunotherapy using an infusion pump in real-life

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Objective: To assess the safety of an ultra-rapid schedule of up-dosing phase of subcutaneous immunotherapy (SCIT) using an infusion pump.

Methods: We selected in real-life, 60 patients with allergic rhinitis and/or asthma who were sensitized to pets (cat or dog). They received SCIT with Alutard® extract (ALK-Abelló, Spain) maintenance vial. A portable infusion pump (IP) (Infusa T®, Medis, Italy) was used for subcutaneous administration of the immunotherapy. The infusion lasted 4-hours in the same day. Adverse reactions were monitored.

Results: Sixty doses were administered. Immunotherapy-related adverse reactions (ARs) were reported in 15 patients. By doses, 5 % were local reactions (LRs) and 21.6 % systemic reactions (SRs). All LRs were delayed. Of the SRs, 46.2 % were immediate while 53.8 % delayed SRs. Symptoms associated with SRs were rhinitis (61.5 %), urticaria (38.5 %), conjunctivitis (30.8 %). The most of SRs were grade I (92.3 %) and were treated rapidly.

Conclusion: The up-dosing phase of subcutaneous immunotherapy (SCIT) using an infusion pump in an ultra-rapid schedule could be considered a form of SCIT’s administration. Despite the possible adverse reactions, which in our study were mild reactions.

Keywords: Subcutaneous immunotherapy; Infusion pump; Allergic rhinitis; Asthma; Pets