

THERAPEUTIC HOTLINE: LETTER

Omalizumab for the treatment of chronic spontaneous urticaria in daily clinical practice in South Spain

Dear Sir,

Omalizumab is a recombinant humanized anti-IgE monoclonal antibody that binds the IgE molecule in the region assigned to the target cell receptor. Its main action lies in the reduction of plasma-free IgE levels and an indirect decrease in the number of high-affinity IgE receptors of basophils and mast cells (Metz et al., 2017).

Chronic spontaneous urticaria (CSU) represents approximately 70% of all chronic urticarias. In 2009, the EAACI/GA(2)LEN/EDF/WAO international guidelines were published with the idea of

unifying the definition, classification, diagnosis, and treatment of urticaria according to scientific evidence in literature, considering the experience in Europe and around the world (Zuberbier et al., 2009). In 2013, the document was revised and updated and today comprises the agreed-upon European guidelines for the management of chronic spontaneous urticaria (Zuberbier et al., 2014).

The main goal of this study is to describe the usage patterns and therapeutic response of UCS patients to omalizumab in real-world clinical practice at five dermatology departments and one allergology

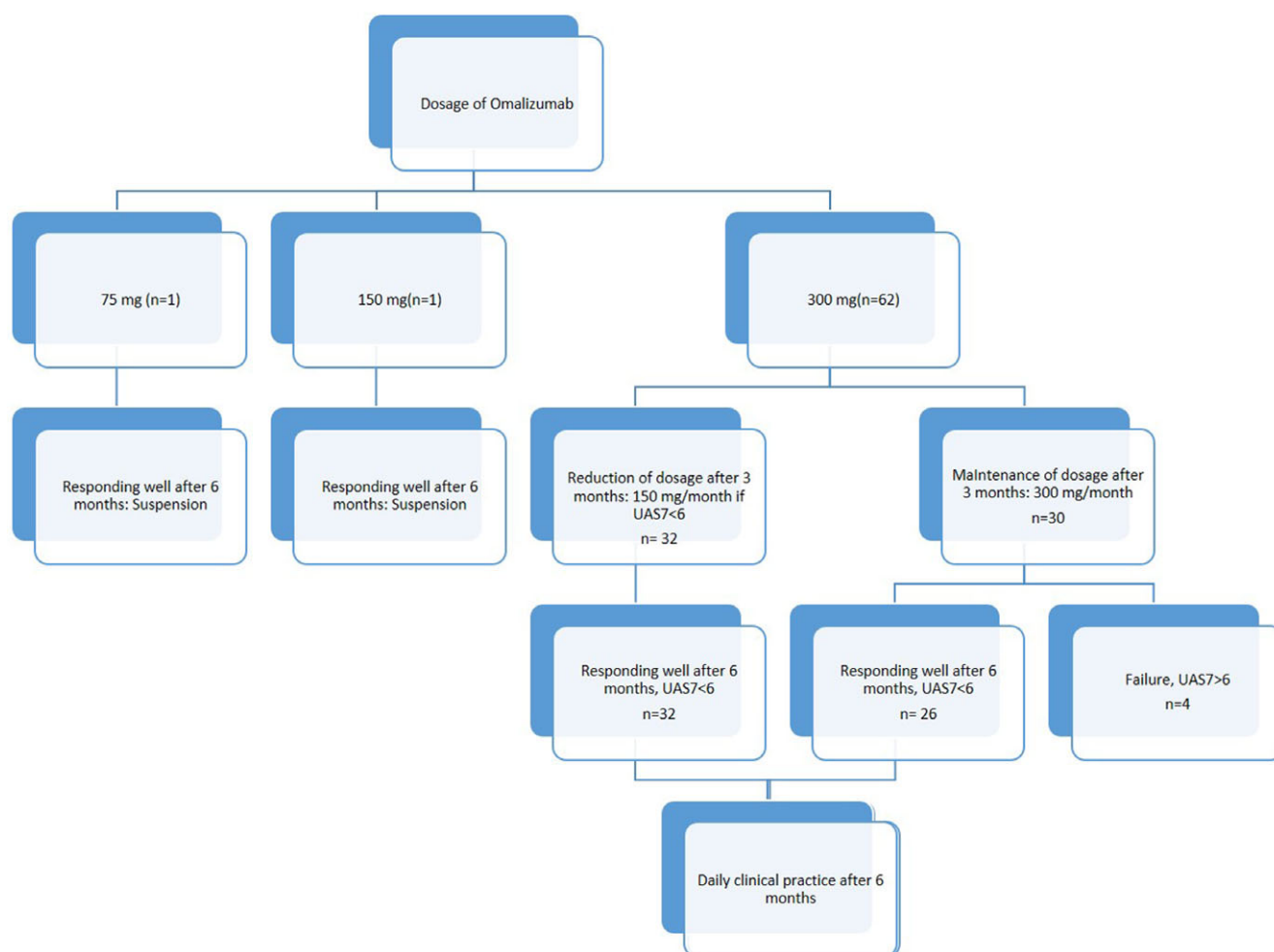


FIGURE 1 Study design and treatment schema

TABLE 1 Progression of the UAS7 index in our series

UAS7	N	Minimum	Maximum	Mean	SD
UAS7 basal	64	10	42	29.21	7.28
UAS7 3 m	64	0	35	3.14	6.31
UAS7 6 m	64	0	28	2.53	5.35
UAS7 12 m	25	0	28	4.16	8.05

UAS7 = urticaria activity score 7; m = month.

department in the autonomous region of Andalusia, located in the south of Spain. The secondary goal is to describe the epidemiological and clinical characteristics of evaluated patients.

Five dermatology departments and one allergology department from the autonomous region of Andalusia in the south of Spain participated in this study. In this study, we included 64 patients aged above 18 years who were diagnosed with chronic spontaneous urticaria. They underwent treatment with omalizumab during a period between July 2015 and May 2017. All patients in this series of cases received omalizumab by subcutaneous injection in an initial dose between 75 and 300 mg. In order to be included in this study, patients had to complete at least 6 months of treatment and present for a minimum follow-up period of 1 year at the referral department.

Demographic and disease history data were collected for each study patient. Response to treatment was measured by the UAS7 score at baseline and every 3 months. Lack of response to treatment was considered when the UAS7 score was greater than 6 (Figure 1).

Severity data (UAS7) and quality of life data (DLQI) were only collected from those patients who completed 12 months of treatment once the period of induction into the ongoing treatment regimen was finished. Our series was made up of 64 patients, with 40 females and 24 males. All of them had been diagnosed with CSU.

Considering the therapeutic record prior to the prescription of omalizumab, all the patients had undergone treatment with second-generation H1 antihistamines at the approved dose or four times the approved dose.

For at least 3 months, 7.8% of the patients ($n = 5$) had undergone treatment with oral sulfone at doses between 50 and 100 mg/day. For a minimum of 3 months, 42.18% of the patients ($n = 27$) had undergone treatment with cyclosporine at doses between 2.5 and 5 mg/kg/day, according to usual clinical practice.

The progression of UAS7 and DLQI scores are shown in Tables 1 and 2. Of the 62 patients who began their treatment at a 300 mg/month dose and completed the 6 months of treatment, therapeutic failure was defined as UAS7 > 6 and occurred in four patients ($n = 4$; 6.25% of the patients), for whom treatment was terminated. After this period, the 450 mg/month dose was not increased for any of the

patients and a different treatment line was chosen. None of the patients experienced any adverse effects that forced treatment interruption. Three patients (4.6%) experienced moderate arthralgias, and two patients (3.13%) experienced tension headaches.

To date, the largest CSU patient series include an AWARE study, which examined 158 CSU patients from different Scandinavian centers, and the Israeli Forum for Investigating and Treating CSU study, which examined 280 patients. Other case series shown a reduced number of patients (Ensina, de Lacerda, Machado, Camelo-Nunes, & Solé, 2015; Groffik, Mitzel-Kaoukhov, Magerl, Maurer, & Staubach, 2011; Magerl et al., 2010; Thomsen et al., 2017; Vadasz et al., 2017).

Regarding our series, the rapid response experienced by half of the patients in the series allowed us to reduce the dose during the process control. The speed of this response seems to be related to monomeric IgE blocking, near suppression of mast cell degranulation, and prevention in the binding of the IgE to its receptor of high affinity in the basophils, which manifested 1 week after the treatment began (Chang et al., 2015; Kaplan, Giménez-Arnau, & Saini, 2017).

There are a number of limitations to our series, such as the number of patients included, the low representation of allergology departments from our region, and the difficulty in establishing a unified stratification of patients due to the fact that patients came from different departments.

Based on our results and the finding of previous studies, we conclude that omalizumab is an effective second-line drug in CSU management. Due to its versatility, its posology may be modified to suit each patient's needs to significantly improve quality of life. Additionally, it has an excellent safety profile and few notable side effects.

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ETHICAL STATEMENT

This study has been approved by the Ethics Committee at the Hospital Universitario Campus de la Salud of Granada, and all the patients signed an informed consent form authorizing the use of data from their clinical record for research and teaching purposes.

DISCLOSURE STATEMENT

All authors served as a consultant for Abbvie, Janssen, MSD, and Pfizer; gave expert testimony for Abbott Laboratories, MSD, Pfizer, Janssen, Leo-Pharma, Novartis, Celgene, and Lilly.

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TABLE 2 Progression of the DLQI index in our series

DLQI	N	Minimum	Maximum	Mean	SD
DLQI basal	29	9	29	17.55	5.20
DLQI 3 m	29	0	10	1.21	2.31
DLQI 6 m	27	0	12	1.07	2.72
DLQI 12 m	17	0	11	1.88	3.60

DLQI = dermatology life quality index; m = month.

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