

EFFECTIVENESS AND SAFETY OF ANTI-SARS-COV-2 VACCINATION PREPARATION IN PATIENTS WITH CHRONIC RECURRENT URTICARIA

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Abstract. The aim: to develop a personalized algorithm for vaccination against COVID-19 for patients with severe chronic urticaria and to evaluate its effectiveness and safety.

Methods. Patients with severe (according to the UAS7 scale) chronic spontaneous urticaria and concomitant gastroenterological pathology, who were observed at the City Allergology Center, were included in a prospective single-center clinical study. All patients underwent a complete physical examination, evaluation of complaints, history of life and illness, presence of concomitant pathology. Patients with a history of COVID-19 or complete or partial vaccination against COVID-19 were excluded from the study. Blood tryptase level was determined before vaccination using immunofluoroenzymatic analysis (ImmunoCAP). Total serum IgE was determined using an immunochemical method. Preparation for vaccination against the SARS-COV-2 virus was carried out according to the developed algorithm: the appointment of 5 mg of desloratadine orally 30 minutes before vaccination with a normal level of tryptase (< 11 ng/l); and 20 mg of desloratadine 30 minutes before vaccination at an elevated level of tryptase (≥ 11 ng/L) with further observation of the condition of patients during the day after vaccination.

Results. The study included 30 patients aged 24 to 63 years, median age 52 (39-59) years, of which 66.7 % were women. The duration of the disease was, on average, 6 years, and 63.3 % of patients suffered from urticaria for five or more years. All 100 % of patients had a severe course of chronic urticaria: from 28 to 42 points on the UAS7 scale, median 42 (42-42) points. Among patients with severe chronic urticaria and concomitant gastrointestinal pathology included in the study, 60 % had elevated serum tryptase levels, were older and had a higher prevalence of *H. pylori* infection, but a lower prevalence of concomitant allergic pathology. The level of tryptase did not correlate with the level of total IgE.

Conclusions The developed individual algorithm for pre-vaccination preparation of patients with severe chronic urticaria has shown its effectiveness and safety in preparing such a difficult category of patients for vaccination against SARS-CoV-2 infection, which is vital today.

Key words: chronic spontaneous urticaria, blood tryptase, COVID-19, vaccination against SARS-CoV-2, allergopathology, prevention, anaphylaxis.