CROSS-REACTION ANAPHYLAXIS CAUSED BY THE USE OF CERTOLIZUMAB: CASE REPORT

William Barros Hyppolito Ferreira^{1,*}, André Marun Lyrio¹, Vanessa Félix Nascimento Coelho¹, Maria Verônica Russo Macchi¹, Carolina Pellisson Carvalho¹, Nayara Mota Carvalho¹, Rubens Bonfiglioli¹

1. Pontifícia Universidade Católica de Campinas, Campinas (SP), Brazil.

*Corresponding author: wf_ferreira@hotmail.com

BACKGROUND

Allergic drug reactions are adverse events that do not result from known toxicological properties of the drug, but result from immunological reactions to it or its metabolites. Cross-reactivity is a problem of fundamental importance in drug hypersensitivity, defined as the immune response to a substance in an individual previously sensitized with another drug of similar structure.

CASE REPORT

A 38-year-old male patient, smoker, started presenting chronic polyarthritis, inflammatory rhythm, positive rheumatoid factor at 600 and increased inflammatory tests in 2014, being diagnosed with rheumatoid arthritis and starting treatment with methotrexate, sulfasalazine and chloroquine. In August 2017, due to the maintenance of disease activity, it was decided to introduce immunobiological therapy with adalimumab, which was used until June 2018, when secondary treatment failure occurred. The immunobiological was exchanged for one of the same class, and the use of certolizumab was started. In a return visit, the patient reported an improvement in the condition (DAS 28 1.46), but complained of itching in the body on the day he took the medication, which improved with the use of anti-allergic drugs and corticoids. Four months after introduction, he was asymptomatic of rheumatoid arthritis and allergic skin reaction; however, he developed anaphylactic shock after eating pizza. He continued with the treatment for 15 months, when he presented a new episode of anaphylactic shock after ingestion of bread, meat and cheese. Evaluated by an allergist, who raised the hypothesis of cross-reaction related to certolizumab. Thus, it was decided to change the medication again, this time with the replacement of certolizumab by tofacitinib as it is less allergenic than immunobiological, with good control of the symptoms of rheumatoid arthritis and without presenting new episodes of anaphylaxis so far.

CONCLUSION

Certolizumab is an immunobiological TNF-alpha inhibitor and, like any medication, it poses risks to its use. This report illustrates a case of likely cross-reaction with the use of certolizumab. Therefore, we must pay attention to new allergic cross-reactions in patients using immunobiologicals.

KEYWORDS

Cross-reaction anaphylaxis, Anaphylaxis, Certolizumab.