

Treatment of Delayed-onset Inflammatory Reactions to Hyaluronic Acid Filler: An Update

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Sir:

On June 20, 2022, Funt¹ published an article in the journal titled “Treatment of Delayed-onset Inflammatory Reactions to Hyaluronic Acid Filler: An Algorithmic Approach.” In his article, the author outlines his treatment recommendations for delayed inflammatory reactions [sometimes also referred to as late inflammatory response syndrome (LIRS)] based on his personal experience. In 2018, the authors had published an article in the journal titled “Complication Management following Rejuvenation Procedures with Hyaluronic Acid Fillers—An Algorithm-based Approach.”² The attentive reader of both articles might have noticed that the authors came to very similar conclusions back in 2018 than Funt did in his recently published article. However, the authors would like to point out that due to further experience, their treatment recommendations would be by now somewhat different since their original writing, and therefore, they disagree with Funt on some of his recent recommendations, especially when it comes to initiating treatment.

First, in most cases of LIRS, the authors’ first step would consist of a few days of watchful waiting before taking any intervention. The COVID-19 pandemic, bringing along a high number of LIRS cases either by the infection by SARS-CoV-2 itself or by the vaccination against the former (both reactions having different trigger mechanisms), showed that most cases of LIRS resulted in a single, short-lasting bout of an inflammatory reaction with a benign spontaneous course.³ Therefore, a few days of watchful waiting seems to be a reasonable recommendation without putting the patient at unnecessary risk and/or altering the overall prognosis of the disease.

Second, the authors would recommend the use of hyaluronidase as the first-line treatment, even in cases where a bacterial contamination/biofilm is suspected to play a role in this multifactorial disease. Hyaluronidase will help breaking down not only the crosslinked hyaluronic acid but also the matrix of the biofilm embedded within. As the culprits involved in these low-grade infections

usually consist of relatively nonvirulent bacteria such as *Propionibacterium acnes*,⁴ exposing them is more likely to lead to their clearance through the immune system than to cause a flare-up of the infectious process.

And third, the authors would recommend against the use of antibiotics in most cases. Even if a patient’s condition improves on antibiotics, it is not understood whether this is due to the antimicrobial effect of the antibiotic, or rather due to either the anti-inflammatory effect that some of the generally used compounds, such as clarithromycin or doxycycline, have or the mostly benign natural course of the disease itself. Given that, and considering the risk of substantially altering the patient’s microbiome with the intervention, we believe that the use of antibiotics in LIRS may not be justified in many cases and, thus, should be avoided if possible.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

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