

Lactoferrin supplementation for rheumatic diseases (Sjogren's disease): a review article

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Keywords: Rheumatic diseases rheumatoid arthritis, Lactoferrin, Sjögren's syndrome, Inflammation **Grad PostGrad Med J 2024;1Spe:e240302. doi: 10.5281/zenodo.13207633**

Lactoferrin is a glycoprotein found in human milk and secreted into tears by the lacrimal gland. It has different properties, including anti-inflammatory effects, cell growth and DNA synthesis promotion, and antiangiogenic and antitumoral properties. Lactoferrin levels have been studied in rheumatic diseases. In fact, salivary lactoferrin was found to be higher in lupus in comparison to rheumatoid arthritis and healthy controls [1]. In Sjögren's syndrome (SS), a study with 102 SS patients and 20 healthy controls showed elevated tear levels of lactoferrin as compared to controls (86 vs. 20 percent, respectively) [3]. Based on these facts, reviewing the article on lactoferrin supplementation in rheumatic diseases would be interesting. We performed an extensive literature search in Pubmed, Scielo, and LILACS without any language restriction from 1965 to May 2024. Exclusion criteria were review articles and in vivo and in vitro studies. After reviewing titles and abstracts, only one article was found for this review. In that article, Dogru et al. [2] assessed in a crossover-design prospective trial 20 eyes of 10 SS patients (6 females; mean age of 60.5 years old) and 7 SS controls who did not take lactoferrin. Patients received oral lactoferrin 270 mg/day for one month. The authors observed no improvement in the mean corneal sensitivity, break-up test value, central tear film lipid layer thickness, vital staining scores, squamous metaplasia grades, and goblet cell densities. A reduction in artificial tears was also seen after lactoferrin therapy. A minor adverse event was observed in all patients: an increase in loosening of stools for 3 to 7 days with treatment [2]. In conclusion, only one study evaluated the role of lactoferrin in rheumatic disease, where SS was assessed with improvement in lacrimal parameters. Future studies are desired to confirm the present results.

1. Conflict of interest:

The author has no conflicts of interest to declare.

2. Source of Funding:

None

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