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## VI CONGRESSO NAZIONALE AIRO III INTERNATIONAL CONGRESS



Futuro e umanizzazione delle cure nella medicina orale. L'intelligenza artificiale al servizio della persona assistita.

## Recurrent Aphthous Stomatitis treated with IL-10 supplement: a pilot study Cinzia Casu<sup>1</sup>, Federica Cara<sup>1\*</sup>, Claudia Concas<sup>1</sup>, Germano Orrù<sup>1</sup>

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<u>Introduction:</u> Aphthae are inflammatory ulcerative lesions of the oral mucosa, typically associated with recurrent aphthous stomatitis (RAS), a condition characterized by at least 3–4 annual episodes that may impair nutrition and quality of life. Patients with RAS exhibit low salivary levels of IL-10, a cytokine that plays a key role in downregulating inflammatory processes.

Treatment includes topical corticosteroids and immunosuppressants, hyaluronic acid—based gels, or alternatively, low-level laser therapy and photodynamic therapy.

The aim of this pilot study is to evaluate the use of oral drops containing IL-10 (GUNA IL-10) for the control of aphthous recurrences.

<u>Material and methods:</u> According to the parent company's directions, we recommended taking 20 drops under the tongue 2 times per day for 3 months. The patients were interviewed to determine whether any other mouth ulcers had appeared. In all 8 patients, a remarkable reduction in the number of canker sores affecting the mouth was observed after 3 months and after 6 months (3 months after the supplement). The reduction in the number of canker sores in the various subjects occurred after the first month following the administration of the IL-10 supplement.

Results: 3 patients reduced the number of canker sores from 3 (present at the first visit) to 1 at a 3 months follow-up appointment. 2 patients reduced the number from 3 to 0 in the second month of follow-up, and the reduction was maintained at 3 months. One patient with 2 canker sores presented at T0 with 0 canker sores. One patient had 2 canker sores at time T0 and presented 1 canker sore at 2 months; and again, 2 canker sores at a 3 months follow-up appointment. One patient reduced from 6 to 2 aphtous lesions at 3 months.

The average number of canker sores present in the 8 patients was 3,1, whereas the average posttreatment (T3) was 0.87 canker sores. It would have been very interesting to carry out salivary measurements of IL-1, IL-6, and IL-10 in these patients before and after consuming this supplement.

Conclusions: The administration of the IL-10 supplement resulted in a significant reduction of canker sores in the observed patients from the first month, with progressive improvement up to the third month. The average number of canker sores decreased from 3.1 to 0.87 per patient, with three cases of complete remission and four of near-complete remission. Although one patient experienced a recurrence at the third month, the clinical benefit was maintained even three months after therapy discontinuation. These preliminary results suggest that IL-10 supplementation (GUNA IL-10) may represent a promising approach for the management of recurrent aphthous stomatitis, improving patients' quality of life.

The benefit are further enhanced by the supplement's easy availability, as it can be obtained without a medical prescription.

| Patient | T0<br>(n° aphthae) | T2<br>(n° aphthae) | T3<br>(n° aphthae) |
|---------|--------------------|--------------------|--------------------|
| P1      | 3                  | -                  | 1                  |
| P2      | 3                  | -                  | 1                  |
| Р3      | 3                  | -                  | 1                  |
| P4      | 3                  | 0                  | 0                  |
| P5      | 3                  | 0                  | 0                  |
| Р6      | 2                  | -                  | 0                  |
| P7      | 2                  | 1                  | 2                  |
| P8      | 6                  | -                  | 2                  |
| average | 3,1                | -                  | 0,87               |



Т3

T0

## Bibliography:

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