

**TOPYCAL HYALURONIC ACID IN RHINITIS MEDICAMENTOSA:  
COULD OUR PROSPECTIVES BE CHANGED?**

**Vella, Paola. MD, Unit of Otolaryngology, University Campus Bio-Medico, Rome, Italy.**

Casale, Manuele. MD, PhD, Associate Professor, Unit of Otolaryngology, University Campus Bio-Medico, Rome, Italy.

Moffa, Antonio. MD, Unit of Otolaryngology, University Campus Bio-Medico, Rome, Italy

Sabatino, Lorenzo. MD, Unit of Otolaryngology, University Campus Bio-Medico, Rome, Italy.

Iannella ,Raffaella. MD, Area of Otolaryngology University Campus Bio-Medico, Rome, Italy

Lopez, Michele Antonio. MD, Dentist, Private Practitioner, Rome, Italy

Oliveto, Giuseppe. MS, Unit of Otolaryngology, University Campus Bio-Medico, Rome, Italy.

Baptista, Peter. MD, Unit of Otolaryngology, University of Navarra, Campus Universitario,

Pamplona, Spain.

Salvinelli, Fabrizio. MD, Full Professor, Unit of Otolaryngology, University Campus Bio-Medico, Rome, Italy.

**Unit of Otolaryngology, Campus Bio-Medico University, School of Medicine, Via Alvaro del Portillo 21, 00128 Rome, Italy, Tel.: +39 06 22541522**

## Background

This study was designed to prospectively evaluate the role of nebulized hyaluronic acid (HA) given for 10 days as treatment for rhinitis medicamentosa (RM).

## Methods

Twenty-five patients have been treated with HA nebulized through spray-sol twice a day (morning and evening) for 10-days (T1) (HA spray-sol tp). Subsequently, after three days of wash-out, patients were treated with physiological saline nebulized through spray-sol twice a day (morning and evening) for 10 days. (T2) (Saline spray-sol tp). During the recruitment (T0), at T1 and T2, each patient underwent a subjective evaluation (Global Rhinitis Score, VAS questionnaire) and objective evaluation (endoscopic evaluation, anterior active rhinomanometry: RAA).

## Results

HA spray-sol tp significantly improved VAS score ( $T0 = 6.25 \pm 1.64$  vs  $T1 = 3.91 \pm 1.30$ ;  $p < 0.05$ ), whereas there was no statistically significant difference in the Saline spray-sol tp ( $T0 = 6.25 \pm 1.64$  vs  $T2 = 5.062 \pm 1.45$ ;  $p > 0.05$ ), results confirmed by the RAA data (HA spray-sol tp  $T0 = 1.193 \pm 0.83$  vs  $T1 = 0.44 \pm 0.25$ ,  $p < 0.05$ ; Saline spray-sol tp  $T0 = 1.193 \pm 0.83$  vs  $T2 = 0.80 \pm 0.45$ ,  $p > 0.05$ ). An improvement in the GRS questionnaire score was recorded in both groups ( $T0 = 15.37 \pm 5.16$  vs  $T1 = 5.54 \pm 3.23$ ,  $p < 0.05$ ; Saline spray-sol tp  $T0 = 15.37 \pm 5.16$  vs  $T2 = 10, 7 \pm 5.43$ ;  $p < 0.05$ ). Both groups showed significantly reduction of mucosal edema and nasal secretions.

Patients treated with HA spray-sol have reduced or even eliminated (11\25 patients) the use of topical decongestant within 10 days of treatment with HA ( $T0 = 4 \pm 1.53$  vs  $T1 = 0.958 \pm 0.806$ ,  $p < 0.05$ ).

**Conclusion :** The results of this study suggested that Hyaluronic acid administered with Spray-sol should stop the use of nasal decongestants, reduce the nasal obstructive syndrome and improve the quality of life of patients, so plays a pivotal role in the management of RM.