THE POTENTIAL ROLE OF SODIUM HYALURONATE NEBULIZED WITH A NEW NASAL DEVICE (SPRAY-SOL) IN POST-OPERATIVE FUNCTIONAL ENDOSCOPIC SINUS SURGERY FOR CHRONIC RHINOSINUSITIS.

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BACKGROUND

We prospectively evaluated the efficacy of intranasal administration of 9 mg of high molecular weight HA nebulized through a new specific device for nasal cavities named SPRAY-SOL on the improvement of postoperative discomfort of CRS patients undergoing FESS.

METHODS

We enrolled 33 CRS patients randomly assigned into two groups: HA SPRAY-SOL group (18 patients) treated with HA nebulized through SPRAY-SOL twice a days for 30 days and HA SPRAY group (15 patients) treated with HA nebulized through conventional spray twice a days for 30 days.

CRS questionnaire, Visual analogic scale (VAS) and nasal endoscopy were administered at baseline before surgery (T0), 15 days (T1) and 30 days (T2) after FESS.

RESULTS

The mean VAS score of SPRAY-SOL group at T1 was significantly lower than control group (5,2±2,1 vs 10,5±3,7). These significantly better results in SPRAY-SOL group were confirmed also at T2 (2,9±0,8 vs 6,1±3,4).

The CRS score was significantly better at T1 and T2 in both groups in comparison with T0. The mean CRS score values were lower (better) in the SPRAY-SOL group at T1 and T2, even if the difference was not significant (2,9±0,8 vs 6,1±3,4).

Since the first follow up visit the SPRAY-SOL group have showed significantly less crusts, edema and secretions than the SPRAY group ($p<0,05$). Both groups showed a good patients satisfaction and the compliance of SPRAY-SOL group was higher than spray group (98% versus 78%).

CONCLUSION

The results of this prospective study suggest a role of HA nebulized through a specific nasal device named spray-sol as a supportive treatment to minimize patients' discomfort and to fast improvement of nasal respiration in the post-operative FESS with an optimal compliance. Further larger scale studies are needed to confirm the encouraging results obtained.