Zastosowanie hipertonicznego roztworu wody morskiej u chorych po leczeniu operacyjnym nosa i zatok przynosowych

The use of hypertonic sea-water solution in patients after surgery of the nose and paranasal sinuses

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SUMMARY
Surgical operations on the nose are very common otorhinolaryngological procedures. The surgical outcome depends not only on the performance of the procedure itself but also on the postoperative care of the nasal cavities. Clinicians continue their search for agents which would promote cleansing of the nasal cavities and regeneration of the nasal mucosa postoperatively.

The aim of the study: was a retrospective evaluation of the effect of the product Marimer Hypertonic on symptoms in patients who had undergone nasal surgery (septoplasty, functional endoscopic sinus surgery, surgical removal of nasal polyps).

Material and method: The medical records included details of full history and physical examination on postoperative days 1, 7 and 14. The medical records of 120 patients were randomly selected from all records. The medical records of 120 patients were randomly selected from all records. The medical records were consecutively selected using the following criteria: 1–Operation type; septoplasty group A and B, FESS group C and D or classical surgical removal of nasal polyps group E and F, 2–Use (group B, D, F) or non-use (group A, C, E) of the hypertonic sea water solution aerosol for nasal douching (Marimer Hypertonic 2.2% sea-water solution). All patients included in the postoperative follow-up at the ENT Outpatient Clinic assess their symptoms by completing a standard self-assessment chart. The symptoms include nasal obstruction, discharge and crusting in the nasal cavities, pain in the nose and paranasal sinuses, reduction of smell, and general health (disease severity) and are assessed on day 1 after removal of nasal packing and on treatment days 7 and 14. At the same time, a clinician assesses their condition, including general health, nasal blockage, discharge and crusting in the nasal cavities, appearance of the nasal mucosa, and sense of smell evaluated by a scratch test using a smell book and a felt-tip pen test.

Results: A statistically significance cance difference in the severity of disease between group A (control) and group B (using Marimer Hypertonic) indicates a statistically significant beneficial effect of nasal douching with Marimer Hypertonic after septoplasty. As early as day 7 after surgery, the disease severity rated by the participants was reduced by 58% in patients using Marimer Hypertonic compared to 25% in controls. On day 14, the reduction was by 84% and by 51% respectively. The use of Marimer Hypertonic after septoplasty produced a much faster relief of nasal obstruction/blockage as assessed by both patients and clinicians. In the opinion of patients using Mariner Hypertonic, on day 7 and day 14 nasal obstruction/blockage was reduced by 73% and by 87% respectively while in controls the corresponding values were 14% and 48%. Nasal douching with Marimer Hypertonic produced faster relief of discomfort caused by the accumulation of abnormal nasal discharge and crusting. In the assessment of patients from the control group, 14 days after surgery abnormal nasal discharge and crusting persisted at a level similar to that reported immediately after septoplasty. In the group using Mariner Hypertonic, the symptoms reported by patients subsided by 58% and 88% by day 7 and day 14 respectively. As assessed by clinicians using rhinoscopy and endoscopy, the improvement of nasal discharge and crusting was significantly faster and more effective in patients using Marimer Hypertonic (by 70% on day 7 and 95% on day 14) compared to controls (15% and 45% respectively). The use of Marimer Hypertonic after FESS produced a much faster relief of nasal obstruction/blockage as assessed by both patients and clinicians. In the opinion of patients using Mariner Hypertonic, on day 7 and day
14 nasal obstruction/blockage was reduced by 73% and by 87% respectively while in controls the corresponding values were 23% and 61%. Nasal douching with Marimer Hypertonic was found to produce an obvious statistically significant beneficial effect resulting in the relief of discomfort caused by crusting and accumulation of abnormal nasal discharge after FESS. By day 7 the symptoms reported by patients subsided by 78% in patients using Marimer Hypertonic and by 88% in controls. By day 14 the symptoms decreased by 93% and 47% respectively. As assessed by clinicians using rhinoscopy and endoscopy, the improvement of nasal discharge and crusting was significantly faster and more effective in patients using Marimer Hypertonic (by 84% on day 7 and 95% on day 14) compared to controls (11% and 26% respectively). The use of Marimer Hypertonic after polypectomy produced a much faster relief of nasal obstruction/blockage as assessed by both patients and clinicians. On day 7 nasal obstruction/blockage was reduced by 73% in patients using Marimer Hypertonic and by 14% in controls. On day 14 the corresponding values were 89% and 50%.

Conclusions: The findings of the present study support the investigators opinion that the use of hypertonic sea-water solution, i.e. the product Marimer Hypertonic should be recommended for nasal douching after corrective nasal septal surgery (septoplasty), functional endoscopic sinus surgery (FESS) and surgical removal of nasal polyps (polypectomy). The use of Marimer Hypertonic facilitates maintenance of normal patency of the nasal cavities, reduces the amount of abnormal nasal discharge and crusting and speeds up healing of iatrogenic injuries of the mucous membrane of the nose.

Hasła indeksowe: hipertoniczny roztwór wody morskiej, leczenie, przynosowych operacje, nos, zatoki przynosowe, polipy nosa

Key words: hypertonic sea-water solution, rhinosinusitis, treatment, surgery, nose,