Feasibility of Balloon Sinuplasty in Korea: our first experiences

Joon Ho Kim, Jeong-Hoon Seol, Do-Kwang Jung, Yong-Bae Lee, Sang-Duck Lee

Department of Rhinology, HANA ENT HOSPITAL

Introduction: Balloon sinuplasty (BSP) is a newly developed catheter-based technique for dilating sinus ostia to improve sinus ventilation and drainage. BSP has been in clinical use since 2005, but there has been many debates and criticisms between rhinologists. The aim of this study is to evaluate the feasibility and efficacy of BSP mostly under local anesthesia in Korean population.

Method: We performed BSP in 77 patients with chronic rhinosinusitis refractory to medical therapy from December 2013. Balloon procedures were performed under local anesthesia with/without sedation, but 6 patients under age 10 were performed under general anesthesia. We checked preoperative and postoperative computed tomography and SNOT-20 symptom questionnaire. The medical records of patients were collected retrospectively.

Results: Balloon sinuplasty was successfully done in 99 percent of sinuses (failed in only one sphenoid sinusitis case). Balloon only procedure was done in 55 percent of patients (42 patients), and hybrid technique was done in other 45 percent (35 patients). Mean SNOT-20 improvement score was 18.3 ± 11.8. Mean Lund-Mackay CT score improvement was 5.3 ± 4.1 in postoperative 6 weeks follow up CT. No major complication occurred, but mild synechia around balloon site occurred in 3 cases. Revision maxillary sinus surgery was performed in 3 cases (3.8%) during follow-up.

Conclusion: BSP performed under local anesthesia is well tolerated and successfully dilated sinus drainage pathway. BSP will be an additional tool for treating sinusitis, either alone or with conventional sinus surgery technique.