Relation between HLA-B54 and low dose long-term macrolide treatment in treatment of chronic paranasal sinusitis: Effect of the treatment after endoscopic sinus surgery.

JOONG SAENG CHO

Low dosage and long-term macrolide (LDLTM) treatment has been reported to be effective in chronic respiratory tract disease, including DPB and chronic paranasal sinusitis (PNS). The HLA-B54, found specifically in Mongolian, is known to be more frequent in cases with DPB than healthy persons and the LDLTM treatment has been used postoperatively on patients who received endoscopic sinus surgery (ESS). Number of eosinophil and ECP are involved to be a prognostic factor in treatment of chronic PNS. We designed a study to investigate relationship between HLA-B54 and LDLTM treatment in patients with chronic PNS. HLA-B54, peripheral eosinophil and ECP were parameters and the patients with cough (n = 21) and without cough (n = 28) were subjects in the study. All the subjects underwent ESS and LDLTM for more than 5 months. Patients with chronic rhinitis (CR) and chronic cough (n = 16) were adopted as a control. The subjects were evaluated by symptom score, QOL and satisfaction rate before the operations at starting point of LDLTM treatment (baseline) and 1 month, 2 month, 3 month, 5 month, 1 year after baseline. On ESS group, HLA-B54 was the more favorable than other parameters in the course of LDLTM treatment. On CR group there was no significant difference in number of patient with HLA-B54 (+) subjects with and without cough. So HLA-B54 reactivity could be prognostic factor in treatment of chronic PNS and LDLTM treatment can be recommendable protocol after surgery in HLA-B54 (+) subjects.