Efficacy of Low Dose Sublingual Immunotherapy in Childhood Asthma

Abstrak :

Background: Evidences begin to accumulate that high dose sublingual immunotherapy is as effective as subcutaneous immunotherapy. Since the capacity of sublingual area is similar whether the dose is high or low, the efficacy of low dose SLIT may be important to be studied. Objective: To investigate the efficacy of low dose sublingual immunotherapy in childhood asthma. Methods: Parents signed informed consent after receiving information of the study prior to enrollment. Patients were moderate asthma aged 6-14 years with disease onset of less than 2 years and PEFR variability of more than 15%. Patients were randomly allocated into Group A receiving subcutaneous immunotherapy, Group B receiving low doses sublingual immunotherapy and Group C receiving conventional asthma therapy. Randomization was stratified into two strata according to age, 6-11 years or more than 11 years. Within each stratum, patients were randomized in block of three in each group using systematic random sampling. At the end of three month, lung function tests were performed again. The primary outcome was PEFR variability at the end of the study. Ethical clearance was approved by Ethical Committee of Dr. Soetomo Hospital Surabaya. Results: Distribution of variants as represented by sex, age eosinophil count and total IgE concentration were normal in the three groups. PEFR variability decreased significantly from 16.97+0.81 to 8.50+5.08 and 17.0+0.87 to 8.40+4.72 in group receiving SIT and SLIT respectively (p<0.05), but decreased not significantly from 17.00+0.83 to 10.82+0.541 in control group (p>0.05). Conclusion: Low dose SLIT is as efficacious as SIT in the treatment of mild asthma in children.

Keyword :

childhood asthma, sublingual immunotherapy, subcutaneous immunotherapy, efficacy

Daftar Pustaka :

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