

INCREASING LEVELS OF INTERLEUKIN-1 β , INTERLEUKIN-1 RECEPTOR ANTAGONIST IN BALINESE IDIOPATHIC GRANDMAL EPILEPSY

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Purpose.

To assess the level of proinflammatory and anti-inflammatory cytokines in Balinese children with idiopathic grandmal epilepsy (IGE)

Method and Results.

We studied 25 patients with idiopathic grandmal epilepsy aged... (and control with match age and sex) admitted to. In each patient, serum levels of interleukin-1 b and interleukin-1 receptor antagonist were measured at entry and compare to healthy control.

In group case, mean IL-1 v and IL-1RA. In control group;

Conclusions.

This finding may suggest novel therapeutic approaches to children with IGE

Key words: interleukins, inflammation, IGE

Background

Recent findings suggest that inflammation play an important role in the pathogenesis of epilepsy. Idiopathic grandmal epilepsy is common in children with incidence of...

Interleukin-1 b is the master of pro inflammation cytokine and....

Interleukin-1RA, another member of the IL-1 family is often measured as an indicator of disease severity because IL-1 levels in the circulation are usually very low...because IL-1RA is a specific antagonist of IL-1, elevated levels of IL-1 RA could indicate a desirable clinical scenario for reducing the inflammation caused by IL-1.

Materials and Methods

Patient population

We studied 25 patients with IGE (clear clinic and EEG) (laki, perempuan) aged..years (range ..to...years) admitted to clinic due to seizure. The inclusion criteria were

Study Design

Blood was drawn from patients with IGE on admission to the clinic for assessment of serum levels of IL-1 b and IL-1RA and complete blood count. CBC was measured to assess a possible role of infections that can induced inflammatory response and will be excluded from study. The same to control group.

Laboratory Assays

IL-1 levels were measured by a specific kit (quantikine human IL-1 b R&D systems) with a range from
IL-1RA

Statistical Analysis

Because the data were not normally distributed, nonparametric tests were used; results are expressed as median and range. ANOVA with Newman-Kreuls correction was used for comparison among groups. The spearman test was used for correlations, and discontinuous variables were tested by a contingency χ^2 test. We considered as relevant an increase or decrease in IL-1b and IL-1RA that was above or below the upper limit of normal (repectively, 0,2 ng/ml and 3 pg/ml) were elevated. Percent changes were calculated as (levels at 48 hours-level entry)/level at entry. The odds ratio (OR) was calculated for any increase at 48 hours in IL-1RA by logistic regression analysis, with age, habit dsb all tests were 2 tailed

Results

Clinical characteristic of the patients and risk factors are presented in the table and were similar between the 2 groups. In case group, mean IL-1b and IL-1RA was...
In control group...

Baseline characteristics of Patients

| | Case group | control group | <i>p</i> |
|-------------------------|------------|---------------|----------|
| Clinical characteristic | | | |
| Number of patients | | | |
| Age, y (SD) | | | |
| Sex, M/F | | | |
| IL-1 b | | | |
| IL-1RA | | | |
| Risk factors, n(%) | | | |
| Father with seizure | | | |
| Mother | | | |
| Aunt/ Ancle | | | |
| Grand father | | | |
| Grand mother | | | |
| Therapy OAE, y/n | | | |

Discussion

Our findings indicate that patients with IGE exhibit a higher IL-1 b level than control. IL-1 RA level was associated with protection ?

References