FOLIA MEDICA INDOONESIANA
Vol. 39 No. 2 April - June 2003

Editorial .................................................................................................................. 73

Opinion :
CAN OR SHOULD HUMANS BE CLONED? .......................................................... 74
(Purnomo Suryahudoyo)

CORRELATIONS BETWEEN PSYCHOLOGICAL STRESSOR AND SEVERE PREECLAMPSIA
(SPE) ...................................................................................................................... 76
(JB Dalono)

POST-ADENOTONSILECTOMY MONOCYTE MODULATION IN CHILDREN
WITH OBSTRUCTIVE CHRONIC ADENOTONSILITIS ........................................... 81
(Muhardjo)

MEMORY: WHERE AND HOW MEMORIES STORED? ............................................. 86
(Mohammad Hanafi)

CEREBRAL MALARIA,
I. THE ROLE OF ADHESION MOLECULES IN ITS PATHOGENESIS .................... 94
(Sri Hida Jati BS)

RECONSIDERATION OF EARLY CHILDHOOD VACCINATION (AN EPIDEMIOLOGICAL
STUDY ON RELATIONSHIPS BETWEEN VACCINATION AND AUTISM) ......... 102
(Fuad Amisyari and Nur Mukarramah)

ERYTHROCYTE SEDIMENTATION RATE DETERMINATION IN CHILDHOOD ASTHMA
DUE TO HOUSE DUST ALLERGY .......................................................................... 107
(Anyanto Harsono and Martono Tri Utomo)

COMPARISON OF MEAN TEARS EXAMINATION RESULTS OF SCHIRMER TEST I
USING WHATMAN PAPER NO. 91 AND NO. 41 IN NORMAL PEOPLE ...................... 111
(Kowena Ghazali Hoesin)

Review Article and Clinical Experience:
PLEIOTROPIC PROPERTIES OF STATINS
(Potential Benefits of "PECA-GOMES" for the Elderly) .......................................... 115
(Askandar Tjokroprawiro)

YOUTH PROFILE IN SOME SUBURBAN AREAS IN EAST JAVA
(PRELIMINARY SURVEY OF THE INDONESIAN YOUTH STATURE AT THE FIFTIETH
ANNIVERSARY OF INDONESIA) ............................................................................. 122
(Johan Tumonggor and Hari K Lasmono)

THE ROLE OF PROBIOTIC CONTAINING FORMULA TO THE COURSE OF DIARRHEA .... 127
(Reza G Ranuh et al)

Abstract .................................................................................................................. 132

Published by :
AIRLANGGA UNIVERSITY SCHOOL OF MEDICINE
Accredited no. 02/DIKTI/Kep/2002

| Folia Medica Indonesian | Vol. 39 | No. 2 | Page 73-136 | Apr - Jun 2003 | ISSN 0303-7932 |
## Table of Contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EDITORIAL Vol 39 No 2 2003</td>
<td>73 - 73</td>
</tr>
<tr>
<td>2</td>
<td>OPINION: CAN OR SHOULD HUMANS BE CLONED?</td>
<td>74 - 75</td>
</tr>
<tr>
<td>3</td>
<td>Correlations Between Psychological Stressor and Severe Preeclampsia (SPE)</td>
<td>76 - 80</td>
</tr>
<tr>
<td>4</td>
<td>Post-Adenotonsillectomy Monocyte Modulation in Children with Obstructive Chronic Adenotonsillitis</td>
<td>81 - 85</td>
</tr>
<tr>
<td>5</td>
<td>Memory: Where and How Memories Stored?</td>
<td>86 - 93</td>
</tr>
<tr>
<td>6</td>
<td>Cerebral Malaria I. The Role of Adhesion Molecules in Its Pathogenesis</td>
<td>94 - 101</td>
</tr>
<tr>
<td>7</td>
<td>Reconsideration Of Early Childhood Vaccination (an Epidemiological Study on Relationships Between Vaccination and Autism)</td>
<td>102 - 106</td>
</tr>
<tr>
<td>8</td>
<td>Erythrocyte Sedimentation Rate Determination in Childhood Asthma Due to House Dust Allergy</td>
<td>107 - 110</td>
</tr>
<tr>
<td>9</td>
<td>Comparison of Mean Tears Examination Results of Schirmer Test I Using Whatman Paper No. 91 and No. 41 in Normal People</td>
<td>111 - 114</td>
</tr>
<tr>
<td>10</td>
<td>Review Article and Clinical Experience: Pleiotropic Properties of Statins (Potential Benefits of â€œPECA-GOMESâ€“ for the Elderly)</td>
<td>115 - 121</td>
</tr>
<tr>
<td>11</td>
<td>Youth Profile in Some Suburban Areas In East Java (Preliminary Survey of The Indonesian Youth Stature at The Fiftieth Anniversary of Indonesia)</td>
<td>122 - 126</td>
</tr>
<tr>
<td>12</td>
<td>The Role of Probiotic Containing Formula to The Course of Diarrhea</td>
<td>127 - 131</td>
</tr>
</tbody>
</table>
Correlations Between Psychological Stressor and Severe Preeclampsia (SPE)

1. JB Dalono --> Department of Obstetrics and Gynecology Sebelas Maret University School of Medicine Dr Moewardi Hospital, Surakarta

Abstract

Pregnancy with severe pre-eclampsia may result from various types of stress, including psychological stress. Mechanism of psychological stressor that results in severe preeclampsia is unknown. The objective of this study was to disclose the mechanism from psychological stressor to severe preeclampsia. Results of homogeneous test to maternal age, age of pregnancy, maternal body weight dan laboratory data revealed no difference between S+ group and SPE+ group, S- group and SPE- group, and S+SPE+ group and S-SPE- group. Cortisol levels in S+ group and SPE+ group were not different (p = 0.167), so they were rendered to become one group of S+SPE+. Cortisol levels in group S- and SPE- were also not different (p = 6.343), therefore they were also rendered to be one group of S-SPE-. Biological data from S+SPE+ group and S-SPE- group was multivariately different (p = 0.0001). Biological data in S+SPE+ group and S-SPE- group revealed that the discriminator was cortisol, while IgG was not revealed. This indicated that SPE had a high cortisol level. Conceptual framework assisted with discriminator pattern revealed that the occurrence of SPE from psychological stressor is as follows: psychological stressor affects the hypothalamus to release orticotrophic releasing factor (CRF). The addition of CRF stimulates anterior pituitary gland that releases adenocorticotrophic hormone (ACTH), inducing adrenal cortex to release cortisol. Psychological stressor affecting the hypothalamus through autonomous nerve may enhance adrenal medulla to release cathecolamine, which may inhibit the function of cortisol in monocyte. Monocyte/antigen presenting cells may affect Th to differentiate to become Th1 cell and Th2 cell. Th1 cell will also be inhibited, resulting in the inhibition of IFN gamma and IgG-produced B-cell. In conclusion, SPE mechanism due to psychological stressor can be explained by psychoneuroimmunological approach.

Keyword: psychoneuroimmunology, psychological, stressor, SPE,

Daftar Pustaka: