FOLIA MEDICA INDONESIANA

Vol. 44 No. 1 January - March 2008

CORRELATION BETWEEN DENGUE VIRUS SEROTYPE AND HUMORAL IMMUNE RESPONSE IN PEDIATRIC DENGUE HEMORRHAGIC FEVER
(Aryati, Ely Retno Setyowati, Agung Dwi Wahyu W)

MODULATION OF IMMUNOGLOBULIN G (IgG) AND CORTISOL RESPONSES IN BREATHING EXERCISE
(Elyana Suhartono Asmara, Harjanto, Siswanto)

PREDICTION OF DISTRIBUTION PATTERN OF Aedes Aegypti AS DHF MAIN VECTOR IN JEMBER
(Yudha Nurdian, Asmoro Lelono)

DIFFERENCE OF INTERFERON GAMMA LEVEL (RELEASE ASSAY) IN NURSES EXPOSED TO MYCOBACTERIUM TUBERCULOSIS AND ACTIVE TUBERCULOUS PATIENTS
(Eindang Retnowati, Soedarsono, Novi T)

MOLECULAR EXPRESSION OF ESTROGEN RECEPTOR ALPHA (ERα) AND INTERLEUKIN 6 (IL-6) ON ACCELERATION OF HEALING PROCESS OF LONG BONE SHAFT FRACTURE BY IMMEDIATE REPETITIVE AXIAL COMPRESSION TENSION STABILIZATION (IREACT)
(Achmad Sjarwadi)

IL-4 IN PERIPHERAL BLOOD MONONUCLEAR CELLS AND BRONCHOALVEOLAR LAVAGE PATIENTS WITH PULMONARY TUBERCULOSIS BEFORE AND AFTER TREATMENT WITH ORAL ANTI-TUBERCULOSIS DRUGS
(IF Pallingan)

EFFECT OF ORAL CURCUMIN AND IMMOBILIZATION ON THE DIAMETER OF SKELETAL MUSCLE FIBER IN RATTUS NORVEGICUS
(Ratna Darjanti, Haryadi Soebadi, J Putu Ailt Pawana)

CONTRALATERAL RENAL FIBROBLAST AND TUBULAR CELL APOPTOSIS AND PROLIFERATION IN ARTIFICIAL UNILATERAL TOTAL URETHRAL OBSTRUCTION IN RABBITS
(Prijambodo Tjutardi, Soebajo)

POLYMORPHISM C3435T OF THE MDR-1 GENE PREDICTS RESPONSE TO PREOPERATIVE CHEMOTHERAPY IN LOCALLY ADVANCED BREAST CANCER WITH HER2/Neu EXPRESSION
(Aini Asfaraidi)

Review Article:
CHALLENGE OF ENVIRONMENTAL TOXICOLOGY IN REFORMATION ERA
(Titiak Buntiyanti)

BONE MORPHOGENETIC PROTEIN 4 (BMP4) AND PROSTAGLANDIN ALPHA (PGE2α) MOLECULAR EXPRESSION IN HEALING PROCESS ACCELERATION OF LONG BONE SHAFT FRACTURE USING IMMEDIATE REPETITIVE AXIAL COMPRESSION TENSION STABILIZATION (IREACT)
(Achmad Sjarwadi)

TREATMENT RESPONSE OF CHRONIC MYELOGENIC LEUKEMIA IN DR. SOETOMO HOSPITAL
(Ugrosemo)

Review Article and Clinical Experience:
THE OBESITY PANDEMIC: THE "TIME-BOMB DISEASE" IN THE FUTURE?
Where Have We Been? And What Should We Do?
(Askan Farid Tjiairoawiro)

International Online Distribution by ProQuest™
www.proquest.com

<table>
<thead>
<tr>
<th>Folia Medica Indonesiana</th>
<th>Vol. 44</th>
<th>No. 1</th>
<th>Page 1-66</th>
<th>Surabaya</th>
<th>Jan-Mar 2008</th>
<th>ISSN 0303-7932</th>
</tr>
</thead>
</table>

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>Correlation between Dengue Virus Serotype and Humoral Immune Response in Pediatric Dengue Hemorrhagic Fever</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2</td>
<td>MODULATION of IMMUNOGLOBULIN G (Igg) and CORTISOL RESPONSES in BREATHING EXERCISE</td>
<td>6 - 10</td>
</tr>
<tr>
<td>3</td>
<td>Prediction of Distribution Pattern of Aedes Aegypti as Dhf Main Vector in Jember</td>
<td>11 - 14</td>
</tr>
<tr>
<td>4</td>
<td>Difference of Interferon Gamma Level (Release Assay) in Nurses Exposed to Mycobacterium Tuberculosis and Active Tuberculous Patients</td>
<td>15 - 20</td>
</tr>
<tr>
<td>5</td>
<td>MOLECULAR EXPRESSION OF ESTROGEN RECEPTOR ALPHA (ERα) AND INTERLEUKIN 6 (IL-6) ON ACCELERATION OF HEALING PROCESS OF LONG BONE SHAFT FRACTURE BY IMMEDIATE REPETITIVE AXIAL COMPRESSION TENSION STABILIZATION (IREACT)</td>
<td>21 - 23</td>
</tr>
<tr>
<td>6</td>
<td>Il-4 in Peripheral Blood Mononuclear Cells and Bronchoalveolar Lavage Patients with Pulmonary Tuberculosis Before and After Treatment with Oral Anti-Tuberculosis Drugs</td>
<td>24 - 29</td>
</tr>
<tr>
<td>7</td>
<td>Effect of Oral Curcumin and Immobilization on The Diameter of Skeletal Muscle Fiber in Rattus Norvegicus</td>
<td>30 - 34</td>
</tr>
<tr>
<td>8</td>
<td>Contralateral Renal Fibroblast and Tubular Cell Apoptosis and Proliferation in Artificial Unilateral Total Urethral Obstruction in Rabbits</td>
<td>35 - 40</td>
</tr>
<tr>
<td>9</td>
<td>POLYMORPHISM C3435T OF THE MDR-1 GENE PREDICTS RESPONSE TO PREOPERATIVE CHEMOTHERAPY IN LOCALLY ADVANCED BREAST CANCER WITH HER2/Neu EXPRESSION</td>
<td>41 - 46</td>
</tr>
<tr>
<td>10</td>
<td>Review Article: Challenge of Environmental Toxicology in Reformation Era</td>
<td>47 - 51</td>
</tr>
<tr>
<td>11</td>
<td>BONE MORPHOGENETIC PROTEIN 4 (BMP4) AND PROSTAGLANDIN ALPHA (PGE2α) MOLECULAR EXPRESSION IN HEALING PROCESS ACCELERATION OF LONG BONE SHAFT FRACTURE USING IMMEDIATE REPETITIVE AXIAL COMPRESSION TENSION STABILIZATION (IREACT)</td>
<td>52 - 55</td>
</tr>
<tr>
<td>12</td>
<td>Treatment Response of Chronic Myelogenic Leukemia in Dr. Soetomo Hospital</td>
<td>56 - 59</td>
</tr>
</tbody>
</table>
Abstract

Obesity is a preclinical sign of lifestyle related disease. It is associated with an increased cardiometabolic risk (CMR) factors that appear to directly promote the development of cardiovascular disease (CVD). The Endocannabinoid system (ECS) is an endogenous and physiological system which is important in the control of energy balance and body weight. When the ECS is overactive, additional fat is stored and the risk of insulin resistance, glucose intolerance, elevated triglyceride (TG) levels, and low HDL-C levels is increased. Over activation of the ECS has now been demonstrated in both human obesity and obesity with a predominance of central abdominal adipose tissue. The ESC comprises the CB1 and CB2 receptors and their endogenous ligands, anandamide (AEA) and 2-AG. The activation of the ECS causes hyperphagia, excessive fat accumulation, and increased cardiovascular risk factors. Rimonabant is the first selective CB1-Receptor blocker which eliminates endocannabinoid-induced hyperphagia, lipogenesis, and metabolically improves cardiovascular risk factors; this drug may inhibit nicotine-induced dopamine release leading to smoking cessation. On the basis of preliminary results, rimonabant may be developed for the management of obesity and smoking cessation. Rimonabant can play an important role in reducing obesity-related cardiometabolic risk (CMR) factors.

Keyword : obesity, cardiometabolic, risk, (CMR), endocannabinoid, system, (ECS), CB1, receptor, CB2, receptor, anandamide, (AEA), 2-AG, Rimonabant,

Daftar Pustaka :