FOLIA MEDICA INDONESIANA

Vol. 43 No. 1 January - March 2007

SERUM p53 PROTEIN AND TOTAL LYMPHOCYTE PROFILE IN SEPSIS PATIENTS TREATED WITH CIPROFLOXACIN AND CEFOTAXIME
(Agus Yunhoo Santoso, Nasrunudin, Eddy Soewandojo)

EFFECT OF LORANTHACEAE DAENDRPOTHE SPECIES INFUSION ON SERUM TRANSAMINASE LEVEL AND HEPATIC NECROSIS IN RATS
(Arfa Mustika, Roostantia Indrawati, Ratna Sofania Munir)

GLUCOSE 6 PHOSPHATE DEHYDROGENASE (G6PD) DEFICIENCY IN BAD PREGNANCY HISTORY IN ST. VINCENTIUS A PAULO CATHOLIC HOSPITAL, SURABAYA
(Suhartati, Tri Martini Soemarno, Harsono Notopuro, Heru Santoso)

HEPARIN EFFECT ON VEGF AND EGFR AFTER DEEP SECOND AND THIRD DEGREE BURNS IN RATTUS NOVERGICUS STRAIN WISTAR
(Ruby Riana A, David S PerdanaKusuma)

EXAMINATION OF OxLDL SERUM LEVEL AS THE PROGNOSIS OF ACUTE THROMBOTIC ISCHEMIC STROKE
(Bertha J Amaheka, Moh. Hasan Machfoed, Suhartono Taat Putra)

MENTAL CHANGES IN PARKINSON'S DISEASE
A Study of Fifty Patients
(Tayseer M Zein, Zein Mirghani)

MICROSCOPIC PICTURE AND WATER CONTENT IN DENTIN ANALYSIS OF BONDING AGENT BOND TO DENTIN SURFACE
An Evaluation of Various Humidity
(Adioro Soetojo)

LOCALIZATION OF PLASMODIUM FALCIPARUM ASEXUAL STAGE ANTIGEN BY MOUSE IMMUNE SERA
(Heny Arwati et al.)

DESCRIPTION OF URINARY RETENTION IN WOMEN
A Retrospective Study in Dr Soetomo Hospital Surabaya
(Soetojo)

Review Article:
THE POTENTIAL INTERVENTION ON APOPTOSIS AND CELL CYCLE ACTIVITY IN RHEUMATOID ARTHRITIS
(Joewono Soeroso)

Review Article:
THE ROLE OF MICROGLIA AS PRIME COMPONENT OF CNS IMMUNE SYSTEM IN ACUTE AND CHRONIC NEUROINFLAMMATION
(Nyoman Golden, Sajid Darmadipura)

Review Article and Clinical Experience:
A NOVEL "TWO-IN-ONE" DRUG FIXED COMBINATION OF ROS AND MET Its Roles on IR, Prediabetes, MetS, T2DM and CVD
(Askandar TjokoPrwiro)

International Online Distribution by ProQuest™
www.proquest.com
# Table of Contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Serum P53 Protein and Total Lymphocyte Profile in Sepsis Patients Treated with Ciprofloxacin and Cefotaxime</td>
<td>1 - 6</td>
</tr>
<tr>
<td>2</td>
<td>Effect of Loranthaceae Daendropthoe Species Infusion on Serum Transaminase Level and Hepatic Necrosis in Rats</td>
<td>7 - 12</td>
</tr>
<tr>
<td>3</td>
<td>Glucose 6 Phosphate Dehydrogenase (G6PD) Deficiency in Bad Pregnancy History in St. Vincentius A Paulo Catholic Hospital, Surabaya</td>
<td>13 - 18</td>
</tr>
<tr>
<td>4</td>
<td>Heparin Effect on VEGF and EGFR After Deep Second and Third Degree Burns in Rattus Novergicus Strain Wistar</td>
<td>19 - 22</td>
</tr>
<tr>
<td>5</td>
<td>Examination of OXLDL Serum Level as The Prognosis of Acute Thrombotic Ischemic Stroke</td>
<td>23 - 27</td>
</tr>
<tr>
<td>6</td>
<td>Mental Changes in Parkinson's Disease A Study of Fifty Patients</td>
<td>28 - 31</td>
</tr>
<tr>
<td>7</td>
<td>Microscopic Picture and Water Content in Dentin Analysis of Bonding Agent Bond to Dentin Surface an Evaluation of Various Humidity</td>
<td>32 - 38</td>
</tr>
<tr>
<td>8</td>
<td>Localization of Plasmodium Falciparum Asexual Stage Antigen by Mouse Immune Sera</td>
<td>39 - 43</td>
</tr>
<tr>
<td>9</td>
<td>Description of Urinary Retention in Women A Retrospective Study in Dr Soetomo Hospital Surabaya</td>
<td>44 - 48</td>
</tr>
<tr>
<td>10</td>
<td>Review Article: The Potential Intervention on Apoptosis and Cell Cycle Activity in Rheumatoid Arthritis</td>
<td>49 - 53</td>
</tr>
<tr>
<td>11</td>
<td>Review Article: The Role of Microglia as Prime Component of CNS Immune System in Acute and Chronic Neuroinflammation</td>
<td>54 - 58</td>
</tr>
<tr>
<td>12</td>
<td>Review Article and Clinical Experience: A Novel “Two-In-One” Drug Fixed Combination of Ros and Met its Roles on Ir, Prediabetes, Mets, T2dm And CVD</td>
<td>59 - 63</td>
</tr>
</tbody>
</table>
Localization of Plasmodium Falciparum Asexual Stage Antigen by Mouse Immune Sera

Abstract

Malaria is still a major health problem in the world as well as the increased incidence of this disease in the tropical regions. In Indonesia, rapid people movement from/to Java Island is one of reasons in increasing malaria incidence. The use of imprecise dose of antimalarial drugs for medication in community is causing mutation in the parasite genes. This is resulting in parasite resistance to antimalarial drugs. Genetic variation of P. falciparum affects the diversity of clinical symptoms, pathology, transmission characteristic, and human response to antimalarial drugs. An alternative to overcome this problem is using vaccine. However, due to those reasons and also due to the complexity of parasite life cycle the effective and global vaccine is difficult to produce. Through this research we are trying to develop a malaria vaccine for being applied to Indonesia locally. This research is an early step of the main research in malaria vaccine development. This current research is to characterize Plasmodium falciparum asexual stage antigen in order to find out a malaria vaccine candidate for local Indonesia. Previously, 5 BALB/c mice have been immunized with asexual stage antigen of P. falciparum 2300 strain and Freund complete adjuvant. Sera were collected every single week and used to localize the P. falciparum asexual stage antigen by means of indirect immunofluorescent assay (IFA). The results showed that, sera from 3 and 4 weeks post immunization recognized the antigen. Antigens were localized on the surface of late trophozoite, early and late schizont stages, and on the surface of internal and external merozoites. Mouse sera did not recognize ring form and trophozoite stages. It meant that, there was no contamination with ring form and early trophozoite stages during antigen preparation. Hemozoin or malaria pigment was recognized neither by mouse nor by human sera, due to the present of Fe++ in hemozoin.

Keyword : Plasmodium, falciparum, asexual, stage, antigen,

Daftar Pustaka :