FOLIA MEDICA INDONESIANA

Vol. 40 No. 1-2 January - June 2004

Editorial ........................................................................................................................................... 1

Opinion :
THE DEVELOPMENT OF MEDICAL EDUCATION
A Policy Analysis .............................................................. 2
(Marsetio Donosepoetra)

AQUAPORIN WATER CHANNELS: PHYSIOLOGY AND MEDICINE ...................................................... 3
(Harjanto)

DOT-EIA THYPOID TEST USING OMP Salmonella typhi LOCAL PHAGE TYPE ANTIGEN TO SUPPORT THE DIAGNOSIS OF TYPOID FEVER ......................................................... 10
(Rahayu Anggraini, Indro Handoyo and Aryati)

ANESTHESIA FOR PATIENTS WITH ECLAMPSIA IN DR. SOETOMO HOSPITAL SURABAYA 21
(Sri Wahjoeningsih)

FACIAL NERVE PARALYSIS CAUSED BY BIRTH TRAUMA .............................................................. 25
(Rowena Ghazali Hoisin and Rozalina Loebis)

THE ADHERENCE TO PRESCRIBING GUIDELINES: A DRUG UTILIZATION EVALUATION OF TRAMADOL
(A Study at the Royal Brisbane Hospital - Australia) ........................................................................... 28
(Bambang Subakti Zulkamain)

Review Article and Clinical Experience :
A THERAPEUTIC OPTION IN THE TREATMENT OF PRE-DM, IGT, AND T2DM
(The Roles of Metformin: from Basic to Clinics) ............................................................................... 35
(Askendar Tjokroprawiro)

CDP CHOLINE (CITICOLINE = NICHOLIN) THERAPY ON SOME CASES OF CHILDREN WITH ORGANIC BRAIN SYNDROME ................................................................. 43
(Endang Warsiti)

ERADICATION OF CHOLESTEATOMA AND HEARING RECONSTRUCTION IN MALIGNANT CHRONIC OITIS MEDIA .............................................................................. 48
(Sri Harmadj)

HYPERTENSION MANAGEMENT FROM NUTRITIONAL AND EXERCISE PERSPECTIVES :
A CASE STUDY ................................................................. 51
(Muhammad Ridwan)

Abstrak .................................................................................................................................................... 62

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

Folia Medica Indonesiana Vol. 40 No. 1-2 Page 1-68 Jan - Jun 2004 ISSN 0303-7932
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EDITORIAL Vol 40 No 1-2 2005</td>
<td>1 - 1</td>
</tr>
<tr>
<td>2</td>
<td>OPINION: THE DEVELOPMENT OF MEDICAL EDUCATION A Policy Analysis</td>
<td>2 - 2</td>
</tr>
<tr>
<td>3</td>
<td>Aquaporin Water Channels: Physiology and Medicine</td>
<td>3 - 9</td>
</tr>
<tr>
<td>4</td>
<td>Dot-EIA Typhoid Test Using OMP Salmonella typhi Local Phage Type</td>
<td>10 - 20</td>
</tr>
<tr>
<td></td>
<td>Antigen to Support the Diagnosis of Typhoid Fever</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Anesthesia for Patients with Eclampsia in Dr Soetomo Hospital Surabaya</td>
<td>21 - 24</td>
</tr>
<tr>
<td>6</td>
<td>Facial Nerve Paralysis Caused by Birth Trauma</td>
<td>25 - 27</td>
</tr>
<tr>
<td>7</td>
<td>The Adherence to Prescribing Guidelines: A Drug Utilization Evaluation of Tramadol (A Study at The Royal Brisbane Hospital â€“ Australia)</td>
<td>28 - 34</td>
</tr>
<tr>
<td>8</td>
<td>Review Article and Clinical Experience: A Therapeutic Option in the Treatment of Pre-DM, IGT, and T2DM,(The Roles of Metformin: From Basic to Clinics)</td>
<td>35 - 42</td>
</tr>
<tr>
<td>9</td>
<td>CDP Choline (Citicoline = Nicholin) Therapy on Some Cases of Children with Organic Brain Syndrome</td>
<td>43 - 47</td>
</tr>
<tr>
<td>10</td>
<td>Eradication of Cholesteatoma and Hearing Reconstruction in Malignant Chronic Otitis Media</td>
<td>48 - 50</td>
</tr>
<tr>
<td>11</td>
<td>Hypertension Management from Nutritional and Exercise Perspectives: A Case Study</td>
<td>51 - 61</td>
</tr>
</tbody>
</table>
Dot-EIA Typhoid Test Using OMP Salmonella typhi Local Phage Type Antigen to Support the Diagnosis of Typhoid Fever

Abstract

A laboratory study was carried out on 44 sera of typhoid patients (age: 15-45 years, 24 females and 20 males) with positive blood culture for S. typhi, 41 sera non typhoid febrile patients (age: 16-51 years, 17 females & 24 males) with negative blood culture and negative Widal test, 136 sera of healthy persons as normal controls (age: 20-49 years, 95 females & 41 males). The basic principle of the Dot-EIA typhoid test was an indirect Elisa method using nitrocellulose as a solid phase and OMP S. typhi from five locally prevalent phage types as the antigens. Goat anti-human IgM alkaline phosphatase for the Dot-EIA typhoid IgM test and goat antihuman IgG alkaline phosphatase for the Dot-EIA typhoid IgG test were used as conjugates. BCIP/NBT was used as a chromogenic substrate and the results were visible as gray-blue spots on the surface of the nitrocellulose. The Dot-EIA typhoid test could produce results within 3 hours. The result of the Dot-EIA typhoid test showed a good diagnostic value for typhoid fever, a diagnostic sensitivity of 66% for IgM and 86.4% for IgG and when both were determined (IgM and IgG) the diagnostic sensitivity was 97.7%. The diagnostic specificity was 100% for IgM and 90.24% for IgG and if both were determined (IgM and IgG) the diagnostic specificity was 90.24%. The diagnostic efficiency was 82.35% for IgM and 90.24% for IgG and when both were determined (IgM and IgG) the diagnostic efficiency was 90.24%. The diagnostic positive predictive value was 100% for IgM and 90.48% for IgG and when both were determined (IgM and IgG) the diagnostic positive predictive value was 97.7%. From a practical point of view under field conditions, the performance of the Dot-EIA typhoid IgM and IgG test could be considered as moderately practicable and not very expensive (Rp 5.025,- per test). Thus this test could be performed in laboratories up to small hospitals (C type hospitals). Based on these results, it can be concluded that the Dot-EIA typhoid test has a good clinical validity, a moderate practicability and is not very expensive.

Keyword : Dot-EIA, typhoid, test, OMP, S., typhi, antigen, typhoid, fever,

Daftar Pustaka :