Laboratory Medicine: New Frontiers and Future Realms

Hosted by:

- Taiwan Society of Clinical Pathology and Laboratory Medicine (TSCPaLM)
- Asian Society for Clinical Pathology and Laboratory Medicine (ASCPaLM)

Congress Venue: NTUH International Convention Center
Advanced Program

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Sunday, March 27, 2016

10:00-10:30

Room 101 & Room 102

PS-039  Correlation between Levels of MDA and LDL-C with Grade of Coronary Artery Stenosis in Coronary Heart Disease
Purwanto Ap (Indonesia)

PS-040  Misleading A1C Reporting due to Lack of Hemoglobin A in Taiwan
Shu Chen Lee (Taiwan)

PS-041  Performance Evaluation of Cartridge-type Blood Gas Analyzer, i-Smart 300
Ahram Yi (South Korea), Yeo-Min Yun (South Korea)

PS-042  Unusual Hypercholesterolemia in a Clinical Chemistry Laboratory
Ting-Fu Su (Taiwan), Tsong-Shi Chiuheh (Taiwan)

PS-043  Distribution of Soluble Suppression of Tumorigenicity 2 (sST2), N-terminal Pro-brain Natriuretic Peptide (NT-proBNP), High Sensitive Troponin I, and High-sensitive Troponin T in Umbilical Cord Blood
Ahram Yi (South Korea), Mina Hur (South Korea)

PS-044  Association between Work Stress with Oxidative Stress and Inflammatory Biomarkers among Foreign Nursing Assistants
Ko-Hung Chen (Taiwan), Ching-Huang Lai (Taiwan)

PS-045  Role of Troponin T in Ischemic Diagnosis in Stable Coronary Heart Disease
Purwanto Ap (Indonesia)

PS-046  Diagnostic Value of Tumor Markers in Lung Adenocarcinoma-associated Cytologically Negative Pleural Effusions
Cheng-Chuan Su (Taiwan), Tsung-Cheng Hsieh (Taiwan), Chun-Liang Lai (Taiwan), Shih-Ming Tsao (Taiwan)

PS-047  Therapeutic Drug Monitoring of Vancomycin in Neutropenic Patients
Min Hyuk Choi (South Korea), Jooyong Cho (South Korea), Jeong-Ho Kim (South Korea), Sang-Guk Lee (South Korea)

PS-048  Atypical Primary Hyperparathyroidism Presented as Marked Body Weight Loss and Vitamin D Deficiency – A Case Report
Chung-Kuang Chen (Taiwan), Huo-Mu Chen (Taiwan), Po-Chi Huang (Taiwan)

PS-049  Diagnostic Performance of HbA1c for Diabetes Mellitus in Population at Risk
Windarwati Windarwati (Indonesia), Yuni Kusumahartatik (Indonesia), Setyawati Setyawati (Indonesia)

PS-050  Therapeutic Drug Monitoring of Tacrolimus after Voriconazole Administration in a Recipient of Allogeneic Peripheral Blood Stem Cell Transplantation, a Case Report
Wern-Cherng Cheng (Taiwan), Chao-Wei Liu (Taiwan), Shih-Ying Huang (Taiwan)

PS-051  Effect of a Rosmarinic Acid Supplemented Hemodialysis Fluid on Inflammation of Human Vascular Endothelial Cells
Wei-Jie Wang (Taiwan), Ching-Sung Weng (Taiwan)

PS-052  Effectiveness Test of Green Tea (Camellia sinensis) Extract for Decreasing LDL Cholesterol Blood in Vitro
Linda Rosita (Indonesia)
Efectiveness Test of Green Tea (Camellia sinensis) Extract for Decreasing LDL Blood In Vitro

*Linda Rosita*¹, Dewa Gede Andi K², Sufi Desrini²

¹,²Department of Clinical Pathology, Medical Faculty, Indonesia Islamic University, Indonesia.
¹,²Department of Farmakology, Medical Faculty, Indonesia Islamic University, Indonesia.
*larosita25@yahoo.co.id*

Introduction: Green tea is one of the plant that often consumed by people. Tea is not only a drink for pleasure, but tea is also have some advantages and used widely in medical field, katekin or polifenol in green tea can decrease the risk of cardiovasculer disease, prevent diabetes mellitus, anti cancer, prevent soul small from mouth an the others, this polifenol in human body help enzim superoxide dismutase (SOD) that elimate free radical so it can prevent atherosclerosis. The aim of this study is to know the effectivity of green tea (Camellia sinensis) extract to decrease LDL and how much the concentration of green tea (Camellia sinensis) extract that can decrease LDL level.

Method: This study is experimental design, In this study, wistar rat age 2-3 month and 150-200 grams in weight was used.research was done for 14 days with 24 wistar rat as the subject sample was clasifield into 6 groups contain 4 rats. Group 1 as the negative control, key get aquadest and BR2 standart diet. Every times, 0.2 ml aquadest per oral was given by intragastric canula. The blood was taken for sample do measure the LDL level. Blood sample was taken 2 times in 14 days. before research and the end of research. Group II, III, IV, V, dan VI. Are the research group with green tea extract given orally at dose 0.2 ml with concretion 20%, 40%, 60%, 80%, 100%. Extract was given in different time.

Result: Green tea (Camellia sinensis) extract given for 14 days on wistar rat didn’t show significant decrease in LDL level for every groups, but only LDL level decrease at some groups (K-III. 2 & B) and (K-V.2). this increase and decrease is not significant statistically.

Conclusion: Green tea (Camellia sinensis) extract with concretation 40% and 80% can decrease LDL level plasma, but only limited in some population: (K-III.2/ 0.2 ml Green tea extract and K-III.3/ 0.2 ml Green tea extract) and (K-V.2/ 0.2 ml Green tea extract), which is not significant statifically.

Keywords: Green tea extract – Camellia sinensis – LDL cholesterol
EFFECTIVENESS TEST OF GREEN TEA (Camellia sinensis) EXTRACT FOR DECREASING LDL BLOOD IN VITRO

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2Farmakology Departement, Medical Faculty, Indonesia Islamic University, Indonesia
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<table>
<thead>
<tr>
<th>LDL Levels Before Treatment</th>
<th>wistar</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDL</td>
<td>1</td>
<td>38.91</td>
<td>37.90</td>
<td>35.46</td>
<td>27.15</td>
<td>27.15</td>
<td>20.25</td>
</tr>
<tr>
<td>Cholesterol (mg/dl)</td>
<td></td>
<td>3.05</td>
<td>33.03</td>
<td>38.91</td>
<td>8.48</td>
<td>37.90</td>
<td>39.93</td>
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<tr>
<td>Mean</td>
<td></td>
<td>38.05</td>
<td>35.21</td>
<td>35.97</td>
<td>32.87</td>
<td>33.74</td>
<td>29.83</td>
</tr>
</tbody>
</table>

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<th>Group 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDL</td>
<td>1</td>
<td>58.60</td>
<td>59.61</td>
<td>57.58</td>
<td>56.16</td>
<td>47.85</td>
<td>29.18</td>
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<tr>
<td>Cholesterol (mg/dl)</td>
<td></td>
<td>47.85</td>
<td>52.71</td>
<td>44.40</td>
<td>41.97</td>
<td>40.95</td>
<td>52.71</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>50.73</td>
<td>52.96</td>
<td>41.30</td>
<td>44.14</td>
<td>39.22</td>
<td>50.47</td>
</tr>
</tbody>
</table>

REFERENCES:

Chung et al., 1997. Effect of green and black teas (Camellia sinensis L.) on the characteristic microflora of yogurt during fermentation and refrigerated storage http://ioclc.org/abstracts/cho20000839.pdf
Certificate of Attendance

This is to certify that

Linda Rosita

has attended the 14th Asian Society of Clinical Pathology and Laboratory Medicine Congress (2016) held at National Taiwan University Hospital International Convention Center Taipei, Taiwan, March 25-27, 2016.

Jang-Jih Lu, MD, PhD
Chairman,
Organizing Committee, ASCPaLM 2016

Po-Ren Hsueh, MD
Chairman,
Program Committee, ASCPaLM 2016