Achieving Screening Coverage of Cervical Cancer by Documentation on Visual Inspection of Acetic Acid (Do-VIA) in Indonesia

Morbidity Occurs to a Fifth of Referred Post Partum Hemorrhage Cases
The proportion of referred PPtH cases in BSMC 2010-2011 was 2%, of which 20.5% classified as mild and 5% was classified as severe cases. Variables related to significant morbidity and referral factors.

The Rate of Asymptomatic Bacteriuria is Similar in Term and Preterm Deliveries
There was no significant difference of asymptomatic bacteriuria between the subject with preterm delivery and term delivery, but the incidence of asymptomatic bacteriuria in pregnant women in this study was quite high, reaching eight times higher than those stated in other study. Thus, routine urine culture screening policy in early pregnancy still cannot be omitted, considering that asymptomatic bacteriuria can lead to pyelonephritis which can cause maternal and fetal mortality.

The Recommended Time Interval of Decision to Incision in Cesarean Section is Not Achieved in Daily Practice
The current recommendations for the interval between decision to incision is achieved in about 30% of cases. Reasons for delay were interval for patient preparation and operating room preparation. Failure to meet the recommendations does not seem to increase neonatal and maternal morbidity.

Higher Cortisol Level Would Increase the Risk of Spontaneous Abortion
In this study, there was a significant difference in cortisol level in women with spontaneous abortion and < 20 weeks gestational age. However, higher cortisol level would increase spontaneous abortion rate. The mean cortisol level in spontaneous abortion was 27.289 μg/dL. While the mean cortisol level in women with normal pregnancy was 11.769 μg/dL. Analysis of the correlation between cortisol level and spontaneous abortion gave a cut off point for cortisol level of 19.1 μg/dL with sensitivity of 69.9% and specificity of 72%.

Betamethasone was more Effective than N-acetylcysteine for Lung Maturation
Betamethasone was more effective than N-acetylcysteine for lung maturation in newborns threatened with preterm delivery.

The Risk of Expulsion is Higher in IUD Endometrium Distance of More than 10 mm
IUD Cs X-2004 as after vaginal delivery that observed for 42 days found that 3 (7.99%) people have expulsion. There is significant correlation the distance between IUD and ED in expulsion occurrence.

Telomerase Expression Increased the Risk of Borderline Ovarian Tumors
There is significant difference in the expression of telomerase protein in tumor, non-tumor tissue and control. Telomerase expression is higher in borderline ovarian tumors.

Profile of Women with Late Menstrual Period
Our data showed that mean age of women who were undergone menopausal induction is 32.94 ± 3.35 years old and the main reasons to do menopausal induction in this research is the consent of having enough children.

Parity and Duration of Labor Affects the Risk of Urinary Retention in post C-Section Patients
Our study found that the rate of post CS urinary retentions was 3.6%. Risk factors for post CS urinary retentions were duration of labor more than 24 hours and primipara.

Avulsion of the Levator Ani at First Pregnancy
With a greater understanding of the function of pelvic floor muscles, risk factors for trauma and damage as a result of pregnancy and birth, healthcare professionals will have better ability to meet the needs of women in the childbearing year. This study utilized a scoring system that can be used to predict the occurrence of levator ani muscle damage in the end, the decline in quality of life for women, especially after childbirth, can be prevented.

Selective Termination for Fetal Anomalies in Twin Pregnancy
Selective termination for fetal anomaly in twin pregnancy have some aspects to be considered.
Guideline for contributors

Indonesian Journal of Obstetrics and Gynecology will be pleased to receive material contributed by anyone interested in obstetrics and gynecology for farm animals. The Journal is published quarterly by the Faculty of Veterinary Medicine, Universitas Indonesia. All manuscripts should be properly prepared and submitted according to the instructions below. Manuscripts should be in English. Authors should follow the manuscript preparation guide:

1. Title should be brief, specific, and informative. It should be in capital letters and not exceed 40 letters.
2. Name of author(s) should include full names of authors, address to which proofs are to be sent, name and address of the Department(s) to which the work should be attributed.
3. Abstract, concise description (not more than 250 words) of the background, purpose, methods, results, and conclusions required. Keywords (3-5 words) should be provided below the abstract.
4. Introduction describes the problem's background, its formation and purpose of the work and prospect for the future.
5. Methods containing description on used material and scheme of experiments. Method to be explained as possible in order to enable referees examine to understand. The abstract should be given in the unknown method.
6. Result should be presented in logical sequence with minimum number of tables and illustrations necessary for summarizing only important observations. The vertical and horizontal line in the table should be made at the least to simplify the view. Mathematical equations should be clearly stated. Decimal numbers should be separated by point (.) Tables, Illustration, and photographs should be cited in the text in consecutive order. Explain in footnote all non-standard abbreviations that are used.
7. Discussion, analyzing the meaning of the examination's results, in what way the reported result can solve the problems, differences and similarities with previous study and development possibilities. This section should include the conclusion of the reported work and suggestions for further studies if necessary.
8. Conclusion, summary, or recommendations should be written in brief and clear descriptive sentences.
9. Reference should be arranged according to the Vancouver system. References must be cited in the text by the super script Arabic number and arranged in the consecutive order as they are mention. In the reference list should appear at the end of the article in numerical sequence.

I. Research reports preparation guidelines

The test of the manuscript should be divided into the following sections: title name of author(s), abstract, objective, method, result that ended by conclusion, references.

II. Reviews article preparation guidelines

The test of the manuscript should be divided into the following sections: title name of author(s), abstract, introduction exist(s), and case management that complemented with photographs description, discussion, conclusion that ended by conclusion, references.

1. Each article contains a maximum of three graphs. Colour or black and white photographs must be submitted with clear illustrations and graphs. Photographs should be in format A4, with the smallest size of 125 x 195 mm.

Table(s) and figure(s) should be submitted as separate document, and typed using MS Word program, which are typed 1.5 lines spacer with wide margins on 4 x 4 paper. The length of the article should not exceed 12 pages.

2. The left, right, top, and bottom margins should be 2.1 cm or 1 inch lengths. The use of right- or left-hand margins, it makes page arrangement more readable, and ensure conciseness, clarity, and stylistic consistency. All accepted manuscript and their accompanying illustration is mandatory, has never been published elsewhere in full or in part. It is print or electronically, without written permission from publisher. All data, opinion or statement appears on the manuscript is the sole responsibility of the contributor. Accordingly, the publisher, the editorial board, and the executive employees of the Indonesian Journal of Obstetrics and Gynecology accept no responsibility or liability what so ever for the consequence of any such inaccurate or misleading data, opinion, or statement. Ethical cleanness should be attended on research, report, and case report article.

Pedoman untuk penulis

Indonesian Journal of Obstetrics and Gynecology menwajibkan penulis untuk memberikan persyaratan berikut:

1. Judul, harus jelas, spesifik, singkat dan singkat, tidak melebihi 40 huruf acak.
2. Nama Penulis, harus mencantumkan nama lengkap, alamat lengkap, nama dan alamat domisili.
3. Abstract, harus dibuat dalam maksimal 250 kata, dengan rumusan pendahuluan, metode, hasil dan kesimpulan yang diharapkan.
4. Pendahuluan, menunjukkan latar belakang masalah, tujuan penelitian, persiapan dan penelitian dalam bentuk laporan.
5. Analisis, harus melibatkan analysis data yang didapatkan dari penelitian, dan hasil penelitian yang diperoleh.
6. Kesimpulan, harus memberikan hasil penelitian yang dapat menunjang keputusan dalam bentuk laporan.
7. Referensi, harus mencantumkan referensi yang relevan dan terkait dengan penelitian.

Pedoman penyusunan laporan

Laporan penelitian harus dibuat dalam format sebagai berikut: judul, nama penulis, abstrak, pendahuluan, tujuan, metode, hasil dan kesimpulan.

II. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan font terbesar dan berada di awal laporan.

II. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.

III. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.

IV. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.

V. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.

VI. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.

VII. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.

VIII. Laporan penelitian

Judul laporan harus dibuat dengan font terbesar dan berada di awal laporan, sebaiknya menggunakan tanda teks yang digunakan dalam laporan, semua pengacaraan yang digunakan dalam laporan.
Betamethasone was more Effective than N-acetylcysteine for Lung Maturation

Abstract

Objective: To compare the effectiveness of N-acetylcysteine with Betamethasone in fetal lung maturation.

Methods: A double blind randomized clinical trial in women threatened by preterm delivery (28 to 34 weeks of gestation).

Results: There were 96 subjects randomly assigned to N-acetylcysteine [n=48], betamethasone group [n=48], and the control group (who had not been given a tocolytic: n=48). Fetal lung maturation was assessed with the p. The values for lung maturation at random were 5.65. After being treated with the Tapp, there were significant differences between the three groups of this study based on analysis of variance (ANOVA) (p =< 0.05). The average family in the N-acetylcysteine was 6.8±1.5 [3.9±1.5] whereas in the control group, there were 6.2 ± 1.0 [3.9 ± 1.0].

Conclusions: Betamethasone was more effective than N-acetylcysteine for lung maturation in women threatened with preterm delivery.

Keywords: betamethasone, fetal lung maturation, N-acetylcysteine

INTRODUCTION

Respiratory distress syndrome (RDS) is one of the main causes of infant death during the newborn period. The incidence of respiratory distress syndrome (RDS) has been associated with maternal gestational age and birth weight of the newborn, which characterized by difficulty of breathing in infants, signed by the presence the two of four im-

portant symptoms: tachypnea (< 60 bpm), cyanosis, retraction of the ribs and sternal, and respiratory groaning.

In an effort to reduce the incidence and the severity of RDS during threatening preterm delivery, the mother is administered with antenatal steroids or the prophylactic surfactant which can be given when gestation the newborn, or both. There have
been many studies conducted on the use of antenatal steroids with result in reducing of RDS by 50% as demonstrated by Liggins and Howie (1972) and by the NIH Consensus Development Panel (1995) with the conclusion that there is of no evidence of side effects of corticosteroid use in pregnancies with hypertension, gestational diabetes, multiple pregnancy, intrauterine growth restriction and fetal hydrops.7–10

The use of N-acetylcysteine to increase the levels of surfactant, was first conducted in 1980, in patients underwent lung surgery. They evaluated the surface tension of the specimen from lung biopsy. Based on this study, it is known that administration of i.m. 2 x 300 mg NAC significantly increased the stability of the superficial alveolar epithelial fluid by lowering the surface tension and increased the elasticity of lung tissues.11 Administration of N-acetylcysteine in pregnant women who experienced acetaminophen intoxication, can be measured in umbilical blood, proving that N-acetylcysteine had the ability to pass through the placental barrier. N-acetylcysteine was also safe in pregnant and lactating women.12

METHODS

This research was a randomized double blind clinical trial in pregnant women threatened by preterm delivery (28 to 34 weeks) in RSNI Palembang. The study started in August 2010 and ended in February 2012. Inclusion criteria included women with 28-34 weeks of pregnancy threatened by preterm delivery, proven by an ultrasound examination and gave birth before 35 weeks of gestation, willing to join the study and signed the informed consent, and had never received medication for lung maturation in the past pregnancy. Patients who met the study criteria were then checked for physical examination, complete blood count, urinalysis and ultrasound examination. Then the data was recorded in the record of research and study registry book. Patients who were already in a state of labor were assigned to group 3 (control group) and been followed until the delivery. Patients who were given tocolytics, performed simply randomly with the aid of random table made by residents who had been trained previously to determine the group 1 (N-Acetylcysteine) and group 2 (Betamethasone). If side effects occur, the patient dropped out and treated according to the symptoms. The newborn birth weight, Apgar scores and the onset of RDS were observed during the treatment, indicated by clinical symptoms of dyspnea (60x/min), cyanosis, grunting, and retractions and then the severity of asphyxia was determined by Apgar scores (mild, moderate and severe asphyxia). The neonates will then underwent chest radiology examination. Patients received the tocolytic protocol including Nifedipine 10mg per oral, which can be repeated 2-3 times/day, and continued until the contraction disappeared. Mothers who gave birth before 35 weeks of gestation, were tested with lung maturation test. One cc of Amniotic fluid sample was taken if the membrane ruptured >24 hours after the last drug administration. Assessment of fetal lung maturation performed with the Tapp test.

Data were collected in the form of research that has been prepared. Statistical processing of data was performed using SPSS 14 program, using Chi Square test, T-test and ANOVA test.

RESULTS

Of the 90 subjects, the group that received N-acetylcysteine 300 mg i.m. for 3 days (n = 30), betamethasone group 12 mg qd i.v. for 2 days (n = 30) and the control group (who had not given a tocolytic, n = 30), the age distribution of subjects are mostly in the age group of 20-35 years, with a body mass index of 18.5 to 25, housewife, graduated from high school, and the pregnancy was in the 33-34 weeks of gestation. According to the statistical analysis performed, which was chi-square and ANOVA, there was no significant difference in general characteristics of the three groups.

Assessment of fetal lung maturity was performed with the Tapp test. After testing the Tapp, the average number of foam in the group receiving N-acetylcysteine was 4.8 ± 1.3 and there was significant difference in the amount of foam before and after the Tapp test on the N-acetylcysteine group (p = 0.001). On Betamethasone group the average number of foam was less than the N-acetylcysteine group, which was 3.2 ± 1.0, even though there was also a significant difference in the number of foam before and after the Tapp test on Betamethasone group (p = 0.001). Meanwhile, the average number of foam in the control group after the test was as much as 5.5 ± 1.6, but there was no significant difference in the number of foam before and after the Tapp test in the control group (p = 0.077). The mean amount of foam of each re-
Table 1. General characteristic of the subjects

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N-acetylcysteine N %</th>
<th>Betamethasone N %</th>
<th>Control N %</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20</td>
<td>2 (6.7)</td>
<td>0 (0.0)</td>
<td>3 (10.0)</td>
<td>0.392</td>
</tr>
<tr>
<td>20-35</td>
<td>24 (80.0)</td>
<td>25 (81.3)</td>
<td>23 (76.7)</td>
<td></td>
</tr>
<tr>
<td>&gt; 35</td>
<td>4 (13.3)</td>
<td>5 (15.7)</td>
<td>4 (13.3)</td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.5-25</td>
<td>18 (60.0)</td>
<td>18 (60.0)</td>
<td>20 (66.7)</td>
<td>0.020</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>12 (40.0)</td>
<td>12 (40.0)</td>
<td>10 (33.3)</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>22 (72.3)</td>
<td>22 (72.3)</td>
<td>27 (90.0)</td>
<td>0.494</td>
</tr>
<tr>
<td>Laborer</td>
<td>3 (10.0)</td>
<td>4 (13.3)</td>
<td>2 (6.7)</td>
<td></td>
</tr>
<tr>
<td>Civil Servant</td>
<td>5 (16.7)</td>
<td>4 (13.3)</td>
<td>2 (6.7)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior high school</td>
<td>8 (26.7)</td>
<td>9 (30.0)</td>
<td>6 (20.0)</td>
<td>0.062</td>
</tr>
<tr>
<td>Senior high school</td>
<td>20 (66.7)</td>
<td>18 (60.0)</td>
<td>22 (73.3)</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>2 (6.7)</td>
<td>2 (6.7)</td>
<td>2 (6.7)</td>
<td></td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>18 (60.0)</td>
<td>14 (46.7)</td>
<td>18 (60.0)</td>
<td>0.543</td>
</tr>
<tr>
<td>2</td>
<td>5 (16.7)</td>
<td>5 (16.7)</td>
<td>9 (30.0)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5 (16.7)</td>
<td>5 (16.7)</td>
<td>3 (10.0)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2 (6.7)</td>
<td>2 (6.7)</td>
<td>9 (30.0)</td>
<td></td>
</tr>
<tr>
<td>Gestation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33-34 (w)</td>
<td>20 (66.7)</td>
<td>22 (73.3)</td>
<td>14 (46.7)</td>
<td>0.006</td>
</tr>
<tr>
<td>&lt; 33 (w)</td>
<td>10 (33.3)</td>
<td>8 (26.7)</td>
<td>16 (53.3)</td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square test

search group based on a complete test of the Tapp can be seen in Table 2.

Table 2. The average of foam in each group after the Tapp test

<table>
<thead>
<tr>
<th>Group</th>
<th>Foam</th>
<th>Before</th>
<th>After</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-acetylcysteine</td>
<td>6.0±0.0</td>
<td>4.8±1.3</td>
<td>0.601</td>
<td></td>
</tr>
<tr>
<td>Betamethasone</td>
<td>6.0±0.0</td>
<td>3.2±1.0</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>6.0±0.0</td>
<td>5.5±1.6</td>
<td>0.677</td>
<td></td>
</tr>
</tbody>
</table>

T-Test test

Then analysis of variance (ANOVA) was being performed to see the overall differences in the three study groups. Statistical test results found a significant differences (p = 0.01) in the amount of foam in all three study groups. Analysis of variance (ANOVA) of the three groups was based on the Tapp test (Table 3).

Table 3. Variance analysis on the three groups based the Tapp test

<table>
<thead>
<tr>
<th>Foam</th>
<th>Groups</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-acetylcysteine</td>
<td>6.0±0.0</td>
<td>0.999</td>
</tr>
<tr>
<td>Betaemethasone</td>
<td>6.0±0.0</td>
<td>0.001</td>
</tr>
<tr>
<td>Control</td>
<td>6.0±0.0</td>
<td>0.999</td>
</tr>
<tr>
<td>Before</td>
<td>4.8±1.3</td>
<td>5.5±1.6</td>
</tr>
<tr>
<td>After</td>
<td>3.2±1.0</td>
<td></td>
</tr>
</tbody>
</table>

The end result of the Tapp test was categorized into mature and immature. We found that there were 21 subjects (70.0%) in the N-acetylcysteine groups with mature lung and 28 subjects (93.3%) in the betamethasone group. Whereas in the control group, there were 15 subjects (50.0%) with mature lung, as listed in Table 4. Thus, it can be said that the administration of Betamethasone was more effective for lung maturation in women threatened with preterm delivery compared with N-Acetylcysteine.
Table 4. Lung Maturation After Administration of N-Acetylcycteine Compared with Betamethasone in Women Threatened Preterm Delivery

<table>
<thead>
<tr>
<th>Group</th>
<th>Test Tapp</th>
<th>R&lt;90%</th>
<th>Maturity (%)</th>
<th>Immaturity (%)</th>
<th>N&lt;90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-acetylcysteine</td>
<td>11 (70.0)</td>
<td>9 (60.0)</td>
<td>2 (13.3)</td>
<td>2 (13.3)</td>
<td>2 (13.3)</td>
</tr>
<tr>
<td>Betamethasone</td>
<td>10 (90.0)</td>
<td>5 (33.3)</td>
<td>2 (7.1)</td>
<td>2 (7.1)</td>
<td>1 (3.3)</td>
</tr>
<tr>
<td>Ceral</td>
<td>15 (50.0)</td>
<td>15 (50.0)</td>
<td>2 (7.1)</td>
<td>2 (7.1)</td>
<td>2 (7.1)</td>
</tr>
</tbody>
</table>

**DISCUSSIONS**

Of the three groups there were no significant differences in general characteristic included age distribution of the subject which is mostly in the age group 20-35 years, with a body mass index of 18.5 to 25, housewives, graduated from high school, and had pregnancy of 33-34 weeks gestation, with p>0.05. So that, it can be concluded that the subjects in this study was homogen and the final conclusion about the effectiveness of therapy among the three groups can be made.

Assessment of fetal lung maturation performed with the Tapp tests. Limit values for lung maturation at random was 5 foams. If there were no more than 5 foams on the other layer, the lung is considered as a mature lung.13-14 After performed the Tapp test, there was a significant differences from the 3 groups of this study which was based on analysis of variance (ANOVA) (p = 0.001), the average foam in the N-acetylcysteine was 4.8 ± 1.3, while in the group Betamethasone it was 3.2 ± 1.0, and in the control group was 5.5 ± 1.6. The end result of the Tapp test was categorized into mature and immature. There were 21 subjects (70.0%) in the N-acetylcysteine groups with mature lung and 28 subjects (93.3%) in the betamethasone group. Whereas in the control group, there were 15 subjects (50.0%) with mature lung. Based on the results of research Utarel (2009) suggested the administration of a combination of N-acetylcysteine and Decamethasone was proven to be more effective in lung maturation compared to the administration of only N-acetylcysteine (54.5%) or Decamethasone (35.4%).17 In the meantime, Raghuraj study (2005) demonstrated that the 95.7% of patients receiving a combination of N-acetylcysteine and Decamethasone achieved lung maturation, while only 57.2% of patients receiving a single Decamethasone administration achieved the same result.18 The study on the role of N-acetylcysteine on lung was first described in the study by Mereto (1960) of 16 patients underwent thoracotomy surgery and also by Muller (2001), reporting the ability of NAC to protect against damage of surfactant metabolism by NO2.1112-21 Mechanism of action of NAC itself in the process of fetal lung maturation was as a precursor of glutathione, to prevent lipid peroxidation and inactivation of surfactant due to reactive oxygen compounds on the pulmonary type II,22 and that this study showed that the use of corticosteroids, in this case betamethasone, more effective than the use of NAC in fetal lung maturation in women threatened with preterm delivery.

**CONCLUSIONS**

The effectivity of N-acetylcysteine for fetal lung maturation in women threatened with preterm delivery was 70.0%, meanwhile Betamethasone, it was 93.3%. It can be concluded that Betamethasone was more effective than N-acetylcysteine for lung maturation in women threatened with preterm delivery.

**SUGGESTIONS**

Betamethasone administration is recommended for fetal lung maturation in women threatened with preterm delivery. Further research is needed with a larger number of samples in order to obtain data that support the role of N-acetylcysteine drug in lung maturation.

**REFERENCES**
