นิพนธ์ต้นฉบับ • Original Article

ภาวะครรภ์ไข่ปลาอุกในโรงพยาบาลศรีนครินทร์

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Molar Pregnancy in Srinagarind Hospital

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ผลการวิจัย: การศึกษานี้พบว่า ในช่วงเวลาที่ทำการศึกษามีสตรีตั้งครรภ์ที่มาคลอดที่โรงพยาบาลศรีนครินทร์จำนวนทั้งสิ้น 50,629 ราย มีผู้ป่วยครรภ์ไข่ปลาอุกที่มีผลการตรวจยืนยันทางพยาธิวิทยาทั้งหมด 65 ราย สัดส่วนของภาวะครรภ์ไข่ปลาอุกมีค่าเท่ากับ 1.28 ต่อจำนวนการคลอด 1,000 รายหรือ 1 : 779 ของการคลอด ผู้ป่วยมีอายุเฉลี่ย 26.18 ปี ส่วนใหญ่มีอาชีพทำไร่-ทำนา (ร้อยละ 30.77) และมีภูมิลำเนาอยู่ในจังหวัดขอนแก่น(ร้อยละ 56.92) อายุครรภ์โดยเฉลี่ยขณะเข้ารับการรักษา 13.17 สัปดาห์ อาการที่นำผู้ป่วยมาพบแพทย์มากที่สุดคืออาการเลือดออกผิดปกติทางช่องคลอด (ร้อยละ 90.77) อาการคอพอกเป็นพิษพบ 10 รายหรือร้อยละ 15.38 อาการครรภ์เป็นพิษพบ 6 รายหรือร้อยละ 9.23 ผู้ป่วยส่วนใหญ่ (ร้อยละ 69.23) เมื่อมาพบแพทย์มีขนาดของมดลูกใหญ่กว่าที่ควรจะเป็นตามอายุครรภ์ ผู้ป่วยที่ได้รับการส่งตรวจ serum beta-hCG ส่วนใหญ่ (ร้อยละ 89.66) มีผลการตรวจจัดอยู่ใน

Objective: To assess the proportion of molar pregnancy per deliveries in Srinagarind hospital.
Study design: A descriptive study.
Setting: Srinagarind Hospital, Faculty of Medicine, Khon Kaen University.
Subjects: The molar pregnancy patients who were treated at Srinagarind hospital from 1 January 1991 to 31 December 2000.
Method: A retrospective review of molar pregnancy cases treated in Srinagarind hospital was conducted. Information regarding demographic data, clinical manifestations, laboratory results, treatments, follow up and complications were collected and analyzed.
Main outcome measures: The proportion of molar pregnancy per deliveries.
Results: During the study period, there were 50,629 deliveries and 65 molar pregnancy cases treated in Srinagarind hospital. The proportion of molar pregnancy was 1.28 per 1,000 deliveries or 1:779 deliveries. The mean age of the patients was 26.18 years. The majority of the patients (30.77%) were farmers and lived in Khon Kaen province (56.92%). The mean gestational age at admission was 13.17 weeks. The most common presenting symptom was vaginal bleeding (90.77%). Hyperthyroidism and pre-eclampsia were found in 10 cases(15.38%) and 6 cases (9.23%), respectively. Most of the patients (69.23%) were large for gestational age. Most of the patients (89.66%) was classified as high risk due to the beta-hCG level. Abnormal free T4 level was found in 10 out of the 17 cases (58.82%). Most of the patients (58 cases or 89.23%)

กลุ่มเสี่ยงสูง ผู้ป่วย 10 รายจาก 17 ราย (ร้อยละ 58.82) มีผลการตรวจระดับ free T4 ผิดปกติ ผู้ป่วย 58 ราย (ร้อยละ 89.23) ได้รับการรักษาโดยวิธี suction and curettage ผู้ป่วย 35 ราย (ร้อยละ 53.85) มีการมาตรวจติดตามหลังการรักษาครบ ผู้ป่วย 57 ราย (ร้อยละ 87.69) ได้รับการคุมกำเนิดภายหลังการรักษา

สรุป: ภาวะครรภ์ไข่ปลาอุกเป็นภาวะแทรกซ้อนที่สำคัญอย่างหนึ่งที่พบได้ในสตรีตั้งครรภ์ ในโรงพยาบาลศรีนครินทร์สัดส่วนของภาวะครรภ์ไข่ปลาอุกเท่ากับ 1 ต่อ 779 ของการคลอด

คำสำคัญ: การตั้งครรภ์ไข่ปลาอุก

had moles evacuated by suction and curettage. Complete follow up was found in 53.85% of the patients. Most of the patients (57 cases or 87.69%) received post-treatment contraception.

Conclusions: Molar pregnancy is an important complication in pregnancy. In Srinagarind hospital, the proportion of molar pregnancy was 1 per 779 deliveries.

Key words: molar pregnancy

ศรีนครินทร์เวชสาร 2547; 19(3), 136-140 • Srinagarind Med J 2004; 19(3), 136-140

Introduction

Molar pregnancy has long been of both clinical and epidemiological interest because it is a significant complication in pregnancy. Reports of the incidence of molar pregnancy vary by geographic region. It is generally accepted that in developing countries the frequency of molar pregnancy is much higher than that found in developed world. The true proportion of molar pregnancy in each country, however, remains unknown since, in most reports, this figure had only been extrapolated from the results of hospital-based studies. In Srinagarind hospital, the incidence of molar pregnancy was 1:415 deliveries between the year 1980-1986[1]. The recent study from Korea revealed that the incidence of gestational trophoblastic disease in Korea significantly declined in total number from the year1971 to 1995. The authors claimed that this decreasing tendency may be attributed to the economic and medic-social advances occurring in the country during that period[2]. This study is thus designed to determine the proportion of molar pregnancy in Srinagarind hospital during the last decade to see whether a declining trend previously proposed by the Korean study is happening in our centre.

Materials and Methods

A retrospective review of molar pregnancy patients who were treated at Srinagarind hospital, Faculty of Medicine, Khon Kaen University from 1 January 1991 to 31 December 2000 was conducted. Information regarding demographic data, clinical manifestations, laboratory results, treatment, follow-up and complications were collected. Descriptive statistics were used to analyze the data.

Results

The proportion of molar pregnancy per deliveries in Srinagarind Hospital from the year 1991 to 2000 is shown in Table 1. During the study period, a total of 65 molar pregnancy cases were diagnosed and treated in Srinagarind hospital. The total number of deliveries in this hospital during the same period was 50,629. The overall proportion of molar pregnancy was 1.28 per 1,000 deliveries or 1:779 deliveries.

Demographic characteristics of the patients are shown in Table 2. The mean age of the patients were 26.18 years. Concerning the patients' occupation, 30.77% were farmers, 23.08% were government employees and 20.00% were laborers.

Regarding the current living location, the majority of the patients (56.92%) lived in Khon Kaen province. Approximately 38.46% of the patients stayed in the other provinces of the northeastern region of Thailand. Only 4.62% of the study patients came from the central part of Thailand

The distribution of the patients by age group is shown in Table 3. The majority of the patients (53.84%) were between 21-30 years old. About 23.08% of the patients were under or equal to 20 years of age and patients of age above 40 years constituted 3.08% of the study cases.

Regarding gravidity, the majority of the patients

Table 1. Proportion of Molar pregnancy per 1000 deliveries

Year	No. of deliveries	Molar pregnancy	
		No. of cases	Proportion (per 1,000 deliveries)
1991	5,331	9	1.69
1992	5,345	2	0.37
1993	5,324	2	0.38
1994	5,342	8	1.50
1995	5,500	5	0.91
1996	5,658	13	2.30
1997	5,658	6	1.06
1998	4,386	10	2.28
1999	4,035	5	1.24
2000	4,050	5	1.23
Total	**50,629**	**65**	**1.28**

Table 2. Demographic data of molar pregnancy cases

Characteristics	Number of cases (%)
Occupation	
- Farmer	20 (30.77%)
- Government employee	15 (23.08%)
- Laborer	13 (20.00%)
- Housewife	8 (12.31%)
- Business	5 (7.69%)
- Teacher	4 (6.15%)
Current living location	
- Khon Kaen	37 (56.92%)
- Other provinces in the northeastern region of Thailand	25 (38.46%)
- The central part of Thailand	3 (4.62%)
Total cases (%)	**65 (100.00%)**

(78.46%) were gravida 1 or 2. The mean gestational age at admission was 13.17 weeks. About 73.85%of the patients were diagnosed during the first trimester of their pregnancies. The distribution of the patients by gestational age at admission is shown in Table 4.

The information regarding clinical manifestations of the patients are shown in Table 5. All of the patients presented with missing menstruation periods. Besides missing menses, the most common presenting symptom

Table 3. Distribution of the patients by age group

Age (years)	Number of cases (%)
15-20	15 (23.08)
21-25	18 (27.69)
26-30	17 (26.15)
31-35	10 (15.38)
36-40	3 (4.62)
41-45	1 (1.54)
46-50	1 (1.54)
Total cases	**65 (100.00)**

Table 4. Distribution of the patients by gestational age at admission

Gestational age (weeks)	Number of cases (%)
0-7	1 (1.54)
8-14	47 (72.31)
15-21	13 (20.00)
22-28	3 (4.61)
29-36	1 (1.54)
37-42	0 (0.00)
Total cases	**65 (100.00)**

Table 5. The clinical manifestations of molar pregnancy patients

Clinical manifestations	Number of cases (%)
Missing menses	65 (100.00)
Abnormal vaginal bleeding	59 (90.77)
Large for gestational age uterus	45 (69.23)
Hyperemesis gravidarum	26 (40.00)
Hyperthyroidism	10 (15.38)
Pre-eclampsia	6 (9.23)
Passing of mole	6 (9.23)
Total cases	**65 (100.00)**

was abnormal vaginal bleeding (90.77%). Hyperemesis gravidarum was found in 26 cases (40.00%). Hyperthyroidism and pre-eclampsia were detected in 10 cases (15.38%) and 6 cases (9.23%), respectively. Most of the patients (69.23%) were large for gestational age.

Concerning laboratory results, most of the patients (89.66%) was classified as high risk due to beta-hCG level (high risk; beta-hCG ≥100,000 mIU/ml).[3] Thyroid function test was determined using radioimmunoassay (RIA). Among 17 patients who had blood tested for thyroid function, 10 patients (58.82%) were found to have abnormal rising of free T4 levels.

In this study, most of the patients (61 cases or 93.85 %) were diagnosed by pelvic ultrasonography. The typical snow storm appearance was described in approximately 69.23% of total cases. Theca lutein cyst was detected in 26.23% of the patients being investigated. Regarding mole evacuation methods, most of the patients (58 cases or 89.23%) had moles removed by suction and curettage (S&C). Dilatation and curettage (D&C) and hysterectomy were conducted in 3 cases (4.62%) and 4 cases (6.15%), respectively.

Most of the patients (35 cases or 53.85%) had complete post-treatment follow-up for at least 1 year. Some patients (13 cases or 20.00%) had partial follow-up, and there were ten cases (15.38%) who did not come back for a follow-up visit. There was no information regarding follow-up visit in 7 patients (10.77 %).

Most of the patients (57 cases or 87.69%) used contraception after receiving their treatments for molar pregnancies. Oral combined pills were the most common contraceptive method being used among the study patients (56 cases or 86.15%). Tubal resection was chosen in one case (1.54%).

Among the 65 molar cases recruited to this study, only 48 cases had sufficient post-treatment information. Subsequent pregnancies after molar pregnancies occurred in 20 out of these 48 cases (41.67%). All of these 20 pregnancies turned out normal.

Discussion

Molar pregnancy continues to be an important obstetric problem. Many reports have mentioned the incidence of molar pregnancy but such reports have been limited by the lack of a precise and reproducible definition of the disease. The wide variation in the frequency of molar pregnancy has been reported[1-18]. Studies undertaken in North America and European countries revealed the incidence of 1:1,280 to 1: 13,906 pregnancies[7,9] while the reports from Asia and Africa demonstrated the incidence ranged from 1:306 to 1:879 deliveries [1-5, 10,14-16,18]. It is generally accepted that the proportion of molar pregnancy in Asia and Africa is much higher than in America and Europe. The proportion of molar pregnancy in the U.K. and America was about one third lower than that found in Asia.

In this study, we found that the proportion of molar pregnancy in Srinagarind hospital was 1: 779 deliveries during the year 1991-2000. This was much lower than the incidence previously reported by other investigators from our centre (1:415 deliveries between the year 1980-1986)[1]. This declining trend confirmed the findings previously proposed from the Korean investigator[2]. The decline in the proportion of molar pregnancy demonstrated in our centre may reflect the economic and medico-social advances occurring in northeastern Thailand during the past two decades.

It has been reported that the proportion of molar pregnancy is high in women between the ages of 21-30 years. The results of this study showed that 53.84% of our molar pregnancy patients were between 21-30 years of age. The high frequency of molar pregnancy cases detected among this age group, however, does not necessarily mean that the women in this age group have a higher risk of molar pregnancy since, during the study period, the women delivering in our hospital were mostly from this particular age group.

The obstetrics history of the patients revealed that about 78.46% were gravida 1 or 2. Approximately 73.85% of the patients were during their first trimester of pregnancies while molar pregnancies were diagnosed. The mean gestation age at admission was 13.17 weeks. These data did not show much difference from the results of another study previously conducted in northeastern Thailand[5].

Besides missing menses, this study revealed that the most common presenting symptom of molar pregnancy was abnormal vaginal bleeding (90.77%). Large for gestational age and hyperemesis gravidarum were found in 69.23 % and 40.00%of the patients, respectively. These results are comparable to that previously reported by other investigators[1,5].

Regarding complication associated with molar pregnancies, this study demonstrated that clinical hyperthyroidism and pre-eclampsia were found in 15.38% and 9.23% of the study patients, respectively. Biochemical hyperthyroidism (defined as abnormal rising of free T4 levels) was detected in 58.82 % of the patients being investigated. This result was much higher than those previously reported by other investigators[1,5]. This difference may be attributed to the fact that there were higher number of patients having thyroid hormones evaluated in our study comparing to that of other studies conducted earlier. The rather high incidence of biochemical hyperthyroidism detected in our study suggested that a comprehensive pre-treatment hormonal evaluation should be conducted in molar pregnancy cases to prevent serious complications such as thyroid storm that could arise in these patients.

This study also demonstrated that most of molar pregnancy patients (93.85%) were diagnosed by pelvic ultrasonography and had moles evacuated by suction and curettage (89.23%). The majority of the patients (87.69%) received post-treatment contraception and oral combined pills were the most common contraceptive method being used by the study patients. These informations were comparable to those presented in other studies [1,5].

Subsequent pregnancy after molar pregnancy was reported in 41.67 % of the patients with adequate follow-up data. All of these pregnancies turned out as normal. This data was, again, comparable to that previously reported by the group from Sappasithiprasong hospital[5].

Molar pregnancy is an important complication in pregnancy. In Srinagarind hospital, the proportion of molar pregnancy during the last decade was 1 per 779 deliveries. This was much lower than that previously reported during the eighties. This decline may be, at least partly, explained by the economic and medico-social advances occurring in northeastern Thailand during the past two decades.

Acknowledgements

This study was partly supported by the research grant from Faculty of Medicine, Khon Kaen University, Thailand.

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