To study the magnitude of Subchorionic hemorrhage in threatened abortions in a tertiary center

Dr. Aishwarya BR and Dr. Malathi T

Abstract

Introduction: Threatened abortion is defined by the World Health Organization (WHO) as bloody vaginal discharge or frank bleeding through the cervical os during the first half of pregnancy without cervical dilatation. Incidence of threatened abortion is 16 to 25 % in pregnancy. Subchorionic bleeding (Also known as a subchorionic hematoma) is accumulation of blood within the folds of the chorion. Incidence of intrauterine hemorrhage is 4 to 22% in threatened abortions. Purpose of the study is to know the magnitude of subchorionic hemorrhage in threatened abortions.

Aims and Objectives: Correlate between number of patients who had threatened abortion and subchorionic hemorrhage on scan and to obtain magnitude by a retrospective study conducted between October 2018 to October 2019.

Materials and Methods: This retrospective study was performed in the Department of Obstetrics and Gynecology in KIMSH and data was collected from case records retrieved from medical record section over 1year period from October 2018 to October 2019. Case selection done based on inclusion and exclusion criteria. Each patient’s case record was analyzed with regard to age, parity, antenatal history, symptoms, clinical signs and scan report.

Results: The incidence of subchorionic hemorrhage in threatened abortion in our study was 65.6 %. Out of 32 cases of threatened abortions over a year, scans of 21 cases showed varying amount of subchorionic hemorrhage. Out of 21 cases, 16 cases continued pregnancy and 5 cases had large amount of subchorionic hemorrhage who progressed to spontaneous abortion

Conclusion: Hence this study shows subchorionic hemorrhage has been a consistent USG finding in Threatened abortion and also that larger subchorionic hemorrhage has a poor outcome, leading to miscarriage.

Keywords: Subchorionic hemorrhage, threatened abortions, miscarriage

Introduction

- The definition of a threatened abortion defined by the World Health Organization (WHO) is pregnancy-related bloody vaginal discharge or frank bleeding during the first half of pregnancy without cervical dilatation.
- Threatened abortion can present during early pregnancy with lower abdominal pain, and/or vaginal bleeding.
- Nearly 25% of pregnant women have some degree of vaginal bleeding during the first two trimesters and about 50% of these progress to an actual abortion. Incidence of threatened abortion is 16 to 25% in pregnancy.
- Threatened abortion is one of the most common complications during pregnancy and subchorionic hemorrhage is a consistent USG findings in threatened abortion.
- Subchorionic bleeding (also known as a subchorionic hematoma) is the accumulation of blood within the folds of the chorion. Incidence of intrauterine hemorrhage is 4 to 22 % in threatened abortion. Subchorionic hemorrhage can be graded subjectively as small, moderate and large.
- Subchorionic hemorrhage can be self-limiting, resolves spontaneously in most cases of threatened abortion when treated symptomatically or with micronized progesterone and few subchorionic hemorrhage might progress in volume leading to spontaneous abortion.
- Purpose of the study is to know the magnitude of subchorionic hemorrhage in threatened abortions.
Aims and Objectives
To correlate between the number of patients who had threatened abortion and scan showing subchorionic hemorrhage and to obtain magnitude by a retrospective study conducted between October 2018 to October 2019.

Study design
This is a Retrospective study conducted in the Department of OBG of a tertiary care hospital during a period of 1 year.

Material and Objectives
It’s a retrospective study in which data were retrieved from case record with diagnosis of Threatened abortion, cases were selected based on inclusion and exclusion criteria as mentioned below. Ultrasound scan findings noted from the case record.

Inclusion criteria
Singleton pregnancy
Gestational age < 12 weeks
Live gestation

Exclusion criteria
Multiple pregnancy
History of recurrent abortion
Missed abortion, incomplete abortion and inevitable abortions
Gestational age > 12 weeks

Results
The incidence of subchorionic hemorrhage in threatened abortion in our study was 65.6 %.
Out of 32 cases of threatened abortions over a year, 21 cases scan showed varying amount of subchorionic hemorrhage. Out of 21 cases, pregnancy continued in 16 cases who had scan showing small to moderate amount of subchorionic hemorrhage and 5 cases with large subchorionic hemorrhage which progressed to spontaneous abortion.

In Table 1 and Fig 1, it was observed that

- Out of 32 cases of Threatened abortion, 18 cases were between gestational age of 8 to 10 weeks in which 14 (66.6%) cases had subchorionic hematoma and 3 progressed to miscarriage.
- Out of 32 cases, 5 cases went into spontaneous abortion, of which 2 cases had hematoma and 3 cases progressed to miscarriage.

Table 1: Cases % of subchorionic hematoma and progressed to miscarriage

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Gestational age (WK)</th>
<th>No of patients</th>
<th>No with Hematoma (%)</th>
<th>No of patients progressed to miscarriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>8 – 10</td>
<td>18</td>
<td>66.6 (14)</td>
<td>3</td>
</tr>
<tr>
<td>2)</td>
<td>11-12</td>
<td>14</td>
<td>33.4 (7)</td>
<td>2</td>
</tr>
</tbody>
</table>

Fig 1: Cases % of threatened abortion, subchorionic hematoma

The above table 1 and Fig 1 shows that Out of 32 cases of Threatened abortion, 18 cases were between gestational age of 8 to 10 weeks in which 14 (66.6%) cases had subchorionic hematoma and 3 progressed to miscarriage. 14 cases were between 11 to 12 weeks, of which 7(33.4%) cases had hematoma and 2 cases progressed to miscarriage.

Table 2: Increased incidence of threatened abortion and subchorionic hemorrhage between different age groups

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Age of Pt (year)</th>
<th>% of Threatened abortion</th>
<th>% of Hematoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>18-22</td>
<td>40.6(13)</td>
<td>42.8(9)</td>
</tr>
<tr>
<td>2)</td>
<td>23-27</td>
<td>25(8)</td>
<td>23.8(5)</td>
</tr>
<tr>
<td>3)</td>
<td>27-32</td>
<td>34.4(11)</td>
<td>33.4(7)</td>
</tr>
</tbody>
</table>

The above table 2 and fig 2 shows that based on age distribution, study shows increased incidence of threatened abortion (40.6) and subchorionic hemorrhage (42.8) between age group of 18 to 22 years.

Fig 2: Increased incidence of threatened abortion and subchorionic hemorrhage

Table 3: Increased incidence of threatened abortion and subchorionic hemorrhage in primigravida

<table>
<thead>
<tr>
<th>Sl. no</th>
<th>Parity</th>
<th>No of Threatened abortion in %</th>
<th>No of hematoma in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Multigravida</td>
<td>43.75(14)</td>
<td>38.1(8)</td>
</tr>
<tr>
<td>2</td>
<td>Primigravida</td>
<td>56.25(18)</td>
<td>61.9(13)</td>
</tr>
</tbody>
</table>

Fig 3 and Table 3 shows based on parity, the study showed increased incidence of threatened abortion and subchorionic hemorrhage in primigravida.

Discussion
In our study, out of 54 threatened abortion cases between October 2018 to October 2019, 32 cases were selected for this study based on inclusion and exclusion criteria, data collected from case records showed out of 32 cases 21 (65.6%) cases had subchorionic hemorrhage in the scan, in which it was seen more commonly in primigravida (56.25) and between 8 to 10 weeks of gestational age (66.6%). Out of 32 cases, 5 cases went into spontaneous abortion, of
which 3 cases had large amount of subchorionic hemorrhage and 1 case had moderate amount of subchorionic hemorrhage, rest 16 cases with small to moderate subchorionic hemorrhage continued pregnancy when treated symptomatically/micronized progesterone, hence this study also correlates between severity of subchorionic hemorrhage and number of cases going into spontaneous abortion. Hereby this study gives importance and correlation of radiological findings in cases of threatened abortion and prognosis of pregnancy based on quantity of subchorionic hemorrhage.

Conclusion
Hence this study provides information that subchorionic hemorrhage is a consistent USG finding in threatened abortion. Our study also shows that larger subchorionic hemorrhage has a poor outcome, leading to miscarriage. Hereby helps to anticipate the prognosis of pregnancy and counseling the patient.

References