Early Pregnancy Bleeding

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Causes of bleeding in early pregnancy

- Miscarriage
  - Threatened, complete, incomplete, septic, ‘missed’.

- Ectopic

- Other
  - Mole, cervical bleeding.

- Most < 12 weeks
Threatened miscarriage is common

- 20 – 25% of pregnancies
- Approx 25% will miscarry
- No treatment will alter the outcome
  - Widely misunderstood
    - NO EVIDENCE for progestogens or gonadotrophins
- If fetal heart is present everything is very likely to be ok
  - >95% on-going pregnancy rate
Percentages of ART Cycles Using Fresh Nondonor Eggs or Embryos That Resulted in Miscarriage, by Age of Woman, 2008
Ectopic

- 1-2% of all pregnancies
- Risk factors include:
  - previous tubal surgery, previous ectopic pregnancy, Hx of PID, use of IUDs, history of sub-fertility
- Potentially lethal
- Most present at 7-8 weeks
- Pain, bleeding, mass on US/S
Triage (or priority assessment)

- Most cat 4/5
- Severe bleeding/ pain or excessive anxiety
  - Increase
- Paracetamol based analgesia
  - Avoid non-steroidals
Initial Mx

- History, examination, special Ix
  - Ultrasound often not interpretable without full history and exam.
  - Open cervical os = inevitable or incomplete

- Transvaginal Ultrasound
  - If fetus or yolk sac seen = IUP
  - If only gestation sac seen – beware!
  - If nothing seen =
    - Pregnancy of unknown location (PUL)
Discharge or keep?

- **Timing of US/S**
  - Individualised
    - Local services
  - No pain – likelihood of ectopic low
  - Reliable GP / EPAS etc
    - Guidelines, pathways etc.

- **More anxiety?**
Diagnosis of Pregnancy Failure

- No FH with a $\geq 5$ mm embryo
- No yolk sac with MSD of 8-10 mm
- No embryo with MSD of 16-18 mm
- Visible amnion with no embryo

- Any doubt – rescan 7 – 10 days

- Role of progesterone level?
## Terminology – consistency helps

<table>
<thead>
<tr>
<th>Previous term</th>
<th>Recommended term$^6$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous abortion</td>
<td>Miscarriage</td>
</tr>
<tr>
<td>Threatened abortion</td>
<td>Threatened miscarriage</td>
</tr>
<tr>
<td>Inevitable abortion</td>
<td>Inevitable miscarriage</td>
</tr>
<tr>
<td>Incomplete abortion</td>
<td>Incomplete miscarriage</td>
</tr>
<tr>
<td>Complete abortion</td>
<td>Complete miscarriage</td>
</tr>
<tr>
<td>Missed abortion/</td>
<td>Missed miscarriage</td>
</tr>
<tr>
<td>anembryonic pregnancy/</td>
<td>Early fetal demise</td>
</tr>
<tr>
<td>blighted ovum (these reflect different stages in the same process)</td>
<td>Delayed miscarriage$^8$</td>
</tr>
<tr>
<td>Septic abortion</td>
<td>Silent miscarriage</td>
</tr>
<tr>
<td>Recurrent abortion</td>
<td>Miscarriage with infection (sepsis)</td>
</tr>
<tr>
<td></td>
<td>Recurrent miscarriage</td>
</tr>
</tbody>
</table>
Role of testing $B$ hcg

- If pregnancy known to be in-utero – no point
- Testing quantitative $B$ hcg ONLY useful in assessing for ectopic or molar pregnancy
- The level of $B$ hcg is NOT useful for estimating gestation.
**TOTAL HCG REFERENCE RANGES DURING A SINGLE NORMAL PREGNANCY**

<table>
<thead>
<tr>
<th>Weeks of pregnancy</th>
<th>Range</th>
<th>IU/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>40 - 4480</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>270 - 28700</td>
<td>&quot;</td>
</tr>
<tr>
<td>6</td>
<td>3700 - 84900</td>
<td>&quot;</td>
</tr>
<tr>
<td>7</td>
<td>9700 - 120000</td>
<td>&quot;</td>
</tr>
<tr>
<td>8</td>
<td>31100 - 184000</td>
<td>&quot;</td>
</tr>
<tr>
<td>9</td>
<td>61200 - 152000</td>
<td>&quot;</td>
</tr>
<tr>
<td>10</td>
<td>22000 - 143000</td>
<td>&quot;</td>
</tr>
<tr>
<td>14</td>
<td>14300 - 75800</td>
<td>&quot;</td>
</tr>
<tr>
<td>15</td>
<td>12300 - 60300</td>
<td>&quot;</td>
</tr>
<tr>
<td>16</td>
<td>8800 - 54500</td>
<td>&quot;</td>
</tr>
<tr>
<td>17</td>
<td>8100 - 51300</td>
<td>&quot;</td>
</tr>
<tr>
<td>18</td>
<td>3900 - 49400</td>
<td>&quot;</td>
</tr>
<tr>
<td>19</td>
<td>3600 - 56600</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
Change in B hcg with gestation
Subchorionic haemorrhage

- Seen in 1-2% of asymptomatic pregnancies, up to 18% of pregnancies with T1 bleeding
- Poor consensus on significance
- May be associated with an increased risk of loss, especially if:
  - large
  - occurs before 8 weeks GA
  - occurs in women ≥ 35 years
  - associated with vaginal bleeding
Subchorionic haemorrhage
Management of Preg. unknown location (PUL)

- Symptomatic – gynae. referral
  - Exclude ectopic

- Asymptomatic
  - Repeat $B\text{hcg}$, counsel, review, repeat scan 7 -10 days
    - Early pregnancy assessment service
    - Gynae. referral
    - GP follow-up
Management of early pregnancy loss

- Surgical
- Expectant
- Medical
Surgical management

- 80-90% have D & C – too high?

- Surgical evacuation is the treatment of choice in women with:
  - Excessive bleeding
  - Unstable vitals
  - Infection

- Doesn’t appear to reduce complications
Expectant management

- Inevitable or incomplete
  - 79% resolved spontaneously within 3 days
  - No increased complication rate
  - Increased duration of bleeding

- Missed
  - 25% complete miscarriage
  - 16% incomplete, required surgery
Medical management

- Misoprostol
  - Prostaglandin analogue
  - Stimulates uterine activity

- Success ranges from 16 to 96%
Difference in perspectives

- Patient vs medical perspective.
  - “It’s an early pregnancy failure”
  - Complacency from frequency
    - “I lost my baby”
“While you keep trying to be as healthy as possible, sometimes miscarriage is inevitable. If you experience any pain or bleeding, get help immediately, call your doctor / hospital......bleeding with cramps and lower back pains could be very well a signal of an impending miscarriage.

Get help as soon as possible”
Managing the anxiety and distress

- Dignity
- Privacy
- Recognition of enormity
- Information
  - Give it out early
- Support
- Follow-up
- Counselling
- Reassurance
Useful reading

- The care of the patient with threatened miscarriage – RNS hospital 2007

- Early Pregnancy Loss, Management

- Women’s Hospitals Australasia