CASE 4

Short case number: 3_4_4
Category: Endocrine & Reproductive
Discipline: Obstetrics and Gynaecology
Setting: Emergency Department
Topic: Ectopic pregnancy

Case

Soo Howe, aged 19 years, presents with acute right lower abdominal pain and vaginal bleeding. Her last menstrual period was three weeks ago but was much lighter than usual. As she arrives in the emergency department she collapses and her HR is 110/minute and her blood pressure is 50/-.

Questions

1. What is your immediate management of Soo?
2. List the differential diagnosis of pain in the right lower abdomen in a woman of reproductive age.
3. Outline the management options for an ectopic pregnancy that is 3cm in diameter, bHCG 2500IU, and asymptomatic, diagnosed on ultrasound examination to investigate mild vaginal spotting/bleeding.
4. Create a table for the management of suspected ectopic pregnancy dependant on beta HCG and adnexal mass size.
5. What advice would you give a woman with an ectopic pregnancy about future management and risk in another pregnancy?

Suggested Reading

- Abbott, J., Bowyer, L., & Finn, M. (2014). *Obstetrics and Gynaecology: an evidence-based guide (2nd ed).* Australia, Elsevier. Chapter 10

- Edmonds, K. (ed). (2007) *Dewhurst's Textbook of Obstetrics & Gynaecology.* Blackwell Publishing.

ANSWERS

1. **Immediate management of this scenario**
   ABCDE – she is breathing but may need airway support, Oxygen by mask, nasal prongs should be administered. BP 50/0 therefore no perfusion and requires urgent attention to this issue – IV line (14 or 16 gauge in both arms), warmed IV fluids (crystalloid 1-2L stat), FBC Blood cross matched 2Units urgently, bHCG urgently, urinary catheter. Assessment of where the bleeding is coming from. Check no heavy vaginal bleeding, (abdo exam should reveal a tender, rigid abdomen with rebound and guarding) – surgical abdomen requiring immediate intervention - Laparotomy. If Ihaemodynamically stable proceed with laparoscopy. Would be good to place a speculum into the vagina and make sure no products of conception (POC) are in the cervical os (this usually causes low BP and severe bradycardia).

2. **List the differential diagnosis of pain in the right lower abdomen in a woman of reproductive age.**

   O&G – Ectopic, ruptured right ovarian cyst (functional or not), torsion of enlarged ovary (with cyst) but usually accompanied by vomiting, incomplete miscarriage, salpingitis (usually febrile and bilateral)
   Not related to O&G – Appendicitis, Meckel's diverticulum, inflammatory bowel disorder e.g. Crohns disease, ureteric colic, constipation.

3. **Outline the management options for an ectopic pregnancy that is 3cm in diameter, bHCG 2500 IU, and asymptomatic, diagnosed on ultrasound examination to investigate mild per vaginal spotting/bleeding.**

   This is complicated but essentially medical versus surgical management. Medical consists of methotrexate (an anti-folate drug that destroys rapidly dividing tissue). It takes time (a few weeks), pain can increase in the first few days, requires regular third daily bHCG, patient cannot live far from medical help as ectopic can still rupture whilst undergoing treatment and cause massive blood loss/ haemoperitoneum.
   Surgical – Laparoscopic Salpingostomy vs Salpingectomy. Salpingostomy linear incision in tube and removal of ectopic carries a risk of incomplete removal and requires third daily bHCG until < 20 IU.

4. **Create a table for the management of suspected ectopic pregnancy dependant on beta HCG and adnexal mass size.**

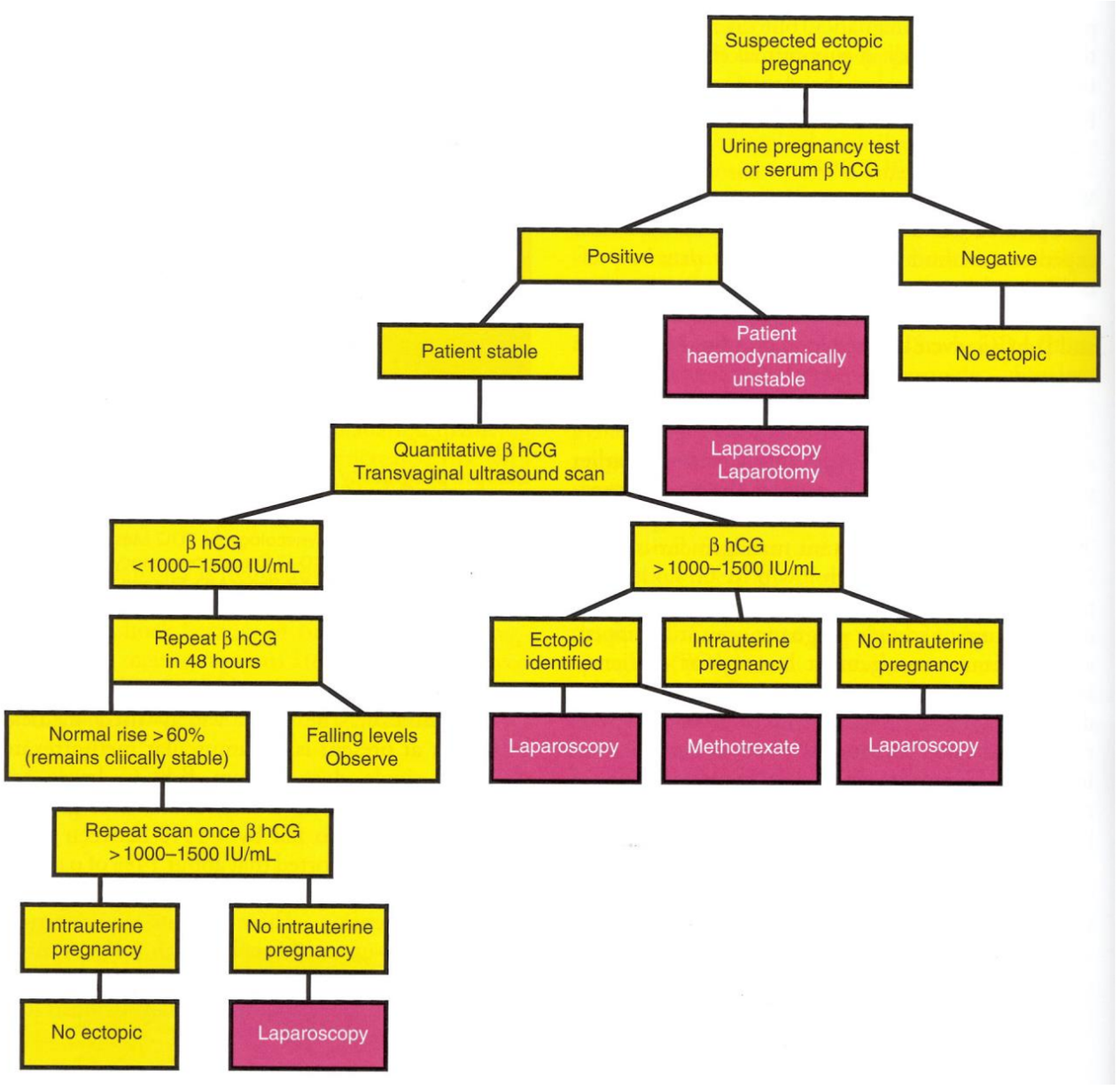

Fig 10.6 From *Obstetrics and Gynaecology: an evidence-based guide (2nd ed.)* by Abbott, J., Bowyer, L. & Finn, M. (2014) Australia, Elsevier.

5. **What advice would you give a woman with an ectopic pregnancy about future management and risk in another pregnancy?**

   There is no consensus on the best method of treatment from a long term fertility point of view. What is known is that having an ectopic increases the risk of the next pregnancy being an ectopic and the following information may be useful in diagnosing another early ectopic that can then be treated medically rather than further surgery.

   If any period of amenorrhoea then a serum quantitative bHCG should be performed. If positive then an early transvaginal U/S should be performed (at 6 weeks amenorrhoea or bHCG > 1500IU) so that the intrauterine sac can be viewed.