Guideline

Ectopic Pregnancy: Management in the Emergency Department

Reason for development

- To standardise/improve patient care.

1 Scope

Women who present with suspected ectopic pregnancy

2 Aim

This guideline is to help the clinician treating a patient who presents with suspected ectopic pregnancy

Ectopic pregnancies are one of the most common causes of pregnancy-related deaths, at a rate of 0.4 deaths/1000 ectopic pregnancies. Most of the women who died were misdiagnosed in the primary care or emergency department setting.

The incidence is increasing, with a peak age of 25-34 years. This increase is due to a rise in:

- prevalence of infertility (a history of infertility gives a four-fold increased risk of an ectopic pregnancy) tubal sterilisation and reconstruction
- intra-uterine contraceptive devices.
- sexually-transmitted diseases especially Pelvic Inflammatory Disease (PID)
- Tubal Damage – Surgery/Appendicitis/sterilization
- Previous Ectopic Pregnancy
- Presence Intrauterine contraceptive device
- Use of progesterone only pill (POP)
- IVF Ovulation / Induction
- Age 35-44
- Smoking

The diagnosis should be suspected in any woman of reproductive age, who presents with irregular vaginal bleeding. Women with an ectopic pregnancy can present in an atypical manner. The majority of women who died from a ruptured tubal pregnancy and sought medical help reported gastrointestinal symptoms (vomiting, pallor, diarrhoea, painful defaecation) or urinary tract symptoms (dysuria, shivering and backache).

Maintain a high index of suspicion of ectopic pregnancy in any woman presenting with abnormal vaginal bleeding, lower abdominal pain or collapse.

CEMACH suggests any pregnant women presenting with abdominal pain should be reviewed by O&G staff.

Maternal Risks

The risks of an undiagnosed ectopic pregnancy are catastrophic haemorrhage, tubal rupture and a compromise of future fertility. Deaths occur from delay in diagnosis and treatment, inadequate surgical treatment, and inadequate therapy of profound haemorrhagic shock.

Diagnosis

The majority of women with ectopic pregnancy will present with a history of vaginal bleeding (usually spotting) and pelvic pain. However, occasionally an ectopic pregnancy will be detected in an asymptomatic woman. These ectopic pregnancies tend to mimic development of a normal intra-uterine pregnancy until sudden rupture occurs.

The diagnosis is often made on clinical suspicion. Rupture of the ectopic gestation with a resulting intra-uterine bleeding is the classic but infrequent presentation. More commonly the diagnosis is less easy and the history and physical findings not typical. A history of amenorrhoea may not be obtained.

It is important to ask about the last period, its timing, duration and amount of bleeding, as well as details of the previous menstrual period. The vaginal bleeding may have been light and prolonged. The subjective signs of pregnancy may not be present, or may have disappeared due to non-viability of the conceptus. The history of pain may also be mild, intermittent and prolonged.

Physical examination may produce minimal, poorly localised tenderness in the abdomen without peritonism, and no pelvic mass may be found. The uterus may feel soft and enlarged.

The differential diagnosis includes:

- a ruptured corpus luteum of pregnancy
- torsion of an ovarian cyst
- pedunculated fibroid
- appendicitis
- renal colic
- pelvic inflammatory disease or endometriosis.

Management of Suspected Ectopic Pregnancy in the ED

Classical symptoms and signs of an ectopic pregnancy in association with collapse/hypotension or tachycardia:

- Transfer the patient to Resus
- Call for the ED Consultant or SpR.
- Start resuscitation: insert 2 large bore cannulae and infuse warm crystalloid, take blood for FBC, CS and cross-match 6 units of blood.
- Refer to the on call gynaecology team

Non-acute presentation:

- All patients of child-bearing age presenting with lower abdominal pain should have a pregnancy test performed on urine.
- If this test is negative, ectopic gestation is virtually excluded.
- If positive, discuss with the on call gynae registrar and refer directly to 'The Emergency Gynae Unit' based on Daphne Ward during week-days (0800hrs-1800hrs) After 1800hrs or at week-ends, refer to gynaecology registrar.

References

Banerjee S *et al* (2001) Expectant management of early pregnancies of unknown location: a prospective evaluation of methods to predict spontaneous resolution of pregnancy. *British Journal of Obstetrics and Gynaecology, 108: 158-63.*

CEMACH (2004) *Why Mothers Die 2000-20002. Report on Confidential Enquiries into Maternal Deaths in the United Kingdom.* RCOG Press, London.

RCOG (1999) *The Management of Tubal Pregnancies.* Clinical Green Top Guidelines Number 21. RCOG, London.

Tay J I, Moore J & Walker J J (2000) Ectopic Pregnancy. *British Medical Journal*; 320: 916-919.

Monitoring the effectiveness of this guideline

Breaches of this standard will be identified by the incident reporting system.

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Document ratification and history	
Approved by:	Sue Robinson
Date approved:	04/01/2007
Date placed on electronic library:	January 2007
Submitted for ratification by:	Clinical and Corporate Governance Committee
Date:	February 2007
Review date:	January 2009 (or earlier in the light of new evidence)
Obsolete date:	April 2009
Authors:	F Hoveyda
Owning Department:	Emergency department
File name:	Ectopic Pregnancy
Version number:	1
Unique identifier no.:	700