Whittington Health NHS

ECTOPIC PREGNANCIES - MANAGEMENT

Subject:	Ectopic Pregnancies - Management
Ratified By:	Maternity Guideline and Audit Committee
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Policy Executive Owner:	Clinical Director
Designation of Author:	Miss K. Vogt , Dr S.Abdelmoumene SpR
Name of Assurance Committee:	Maternity Guideline and Audit Committee
Date Issued:	July 2013
Review Date:	July 2016
Target Audience:	Women's health, Emergency Department, O&G doctors, WDU staff, pharmacist
Key Words:	Bhcg, Progesterone, Ectopic

Version Control Sheet

Version	Date	Author	Status	Comment
4	July 2013	Miss K. Vogt Dr S.Abdelmoumene	Consultant SpR	Updated guideline.

➢ Criteria for use

Ectopic Pregnancies; Management

➢ Background/ introduction

Implantation and development of a pregnancy in any site other than the endometrial cavity.

More than 95% of ectopic pregnancies are located in the tubes the rest are located in other places such as the interstitial portion of the tubes, cervix, ovaries and embedded in a caesarean scar.

2-3% of the women presenting with problems in early pregnancy will have ectopic pregnancies.

Incidence of ectopic pregnancies in the UK: 11/1000 pregnancies .

➢ Risk Factors

- Previous ectopic
- Previous tubal surgery
- History of pelvic inflammatory disease/sexually transmitted disease
- IUCD in situ

➢ Presentation:

- Positive pregnancy test (urine HCG).

- Pain

- Vaginal bleeding

-Collapse : if significant intra-abdominal bleeding.

-Atypical presentation :late presentation with Diarrhoea and

vomiting(CEMACH), and UTI

➢ Clinical management

Initial management

If haemodynamic compromised (tachycardia, hypotension or feeling unwell):

-call for senior help and inform consultant on call.

-crossmatch blood

-Large bore IV access

-fluid resuscitation

-alert anaesthetist and theatre staff of the situation.

If haemodynamically stable…

Ultrasound Scan should be performed as a first line investigation. BHCG and Progesterone levels are only indicated for pregnancy of unknown location or confirmed ectopics.

- Ultrasound Scan: print scan form and liaise with WDU nurse or leave a message for EPDU nurse with patient details and contact number so an appointment can be organised.

Ultrasound diagnostic criteria:

The aim is to visualise an ectopic mass rather than just to exclude an intra-uterine pregnancy.

Diagnostic features:

- adnexal mass suspicious of an ectopic pregnancy

- An extrauterine sac containing a yolk sac +/- fetal pole with or without cardiac activity.

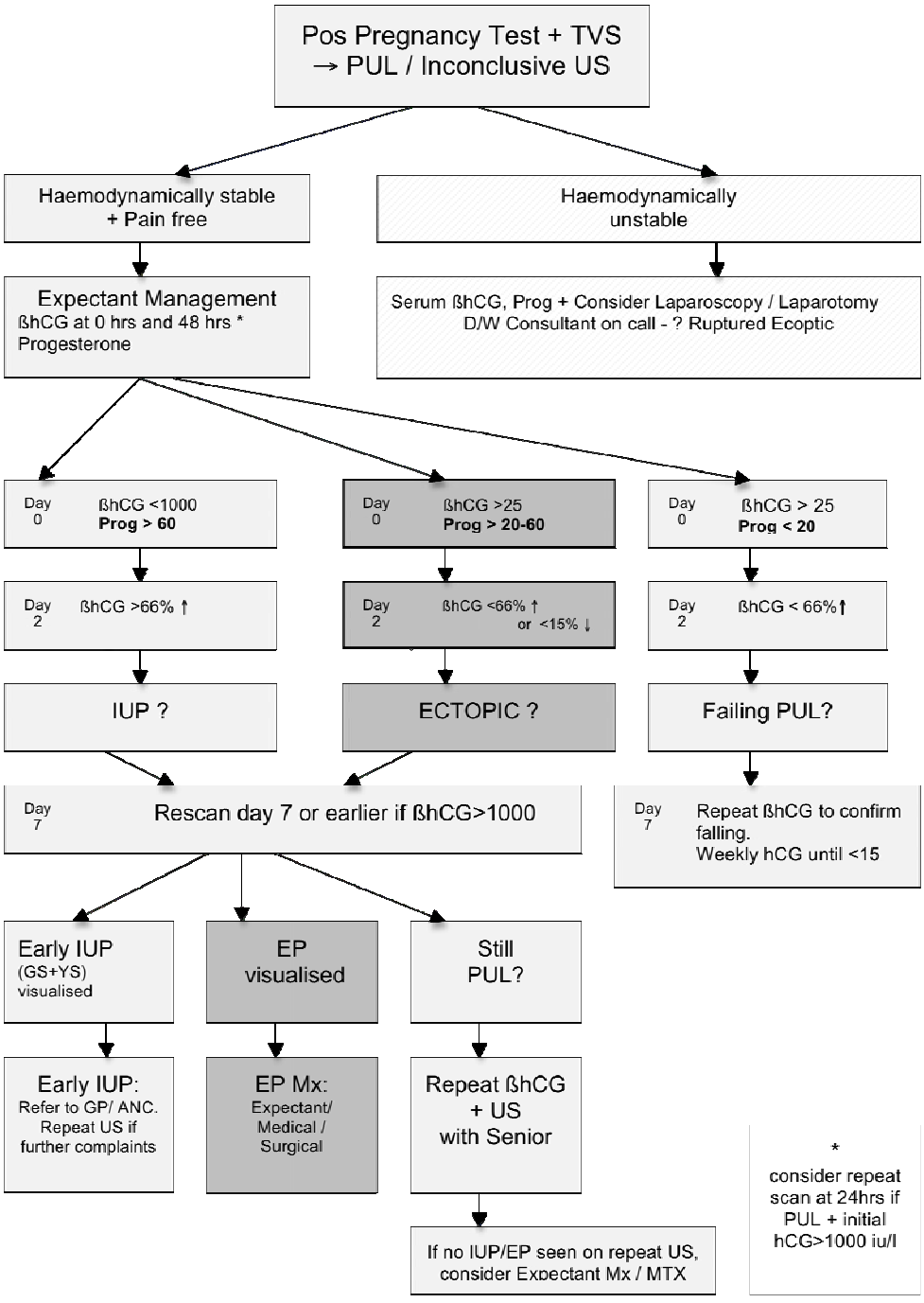
BHCG and Progesterone levels:

In the event of an inconclusive scan/ Pregnancy of Unknown Location: no intra-uterine pregnancy nor an adnexal mass seen , Progesterone level and serial BHCG should be performed .

	Please see Whittington Hospital NHS Trust Guideline: ***''Pregnancy of Unknown Location''***

Progesterone (nmo/l)	*ß-HCG (iu/l)*	**Likely Diagnosis**	**Management**
<20	>25	Resolving pregnancy	Urine pregnancy test of ß-hCG in 7 days
20-60	>25	Ectopic or miscarriage requiring intervention	Serum ß-hCG in 2 days
>60	<1000	Early normal intrauterine pregnancy	Repeat scan when ß-hCG expected >1000
>60	>1000	Ectopic	Repeat scan same day by a senior examiner ± laparoscopy

Flow chart for PUL (13)



Management of ectopic pregnancy:

Management should be discussed with the WDU senior team (Consultants and Specialist Nurses) or the Consultant on-call.

1- Surgical:

Salpingectomy is the surgical treatment of choice. Indications for salpingectomy include:

-tubal rupture or severe tubal damage

-inability to achieve haemostasis after salpingostomy.

Laparoscopic salpingotomy, removal of ectopic pregnancy with conservation of the fallopian tube, may be considered if there is controlateral tubal disease and preservation of fertility required. Salpingotomy patients should have weekly serum HCG to monitor for persistent trophoblastic tissue.

Laparoscopy: This is the preferable surgical management in the haemodynamically stable patient.

Laparotomy: This should be performed if the patient is haemodynamically compromised and is the quickest method of surgical management of haemorrhage. This will depend on the technical skills of the operating surgeon.

2-**Expectant:**

Expectant management should only be used for:

-asymptomatic women with an ultrasound diagnosis of ectopic pregnancy

-no evidence of blood in the pouch of Douglas (POD)

-minimal free fluid in the POD

-decreasing HCG levels that are less than 1000 iu/l at initial presentation.

The follow up of these patients depends on the rate of resolving BHCG levels. There is a risk of ectopic rupture at any time, a repeat TVS should be repeated if there are any concerns about patient symptoms.

Women should be counselled about the importance of compliance with follow up and risk of rupture of ectopic. They should remain in easy access to the hospital.

3-**Medical**

Medical treatment using systemic methotrexate may be offered to women with:

-a small ectopic pregnancy with absence of cardiac activity

-serum HCG<3000 iu/l

-minimal symptoms

-no signs of intra-abdominal bleeding

Women should have liver and renal function tests, Group and Save and FBC prior to treatment.

-Dose: Methotrexate 50mg/m2, intramuscular as single dose dispensed by the pharmacist and given by a chemotherapy trained nurse or the gynae SpR.

-Side effects: Abdominal pain, conjunctivitis, stomatitis and gastrointestinal upset, impaired liver function, bone marrow depression and photosensitivity.

-Advice: Increase oral fluid intake. Reliable contraception must be used for 3 months following treatment because of the teratogenic risk.

Avoid: alcohol, aspirin, NSAIDs, folic acid supplements and exposure to sunlight.

Women should be given clear information about the possible need for surgical management if medical management fails. There is always a risk of ectopic rupture until the pregnancy test is negative and the ectopic pregnancy has resolved on scan.

Provide the patient information leaflet. (appendix X)

-Follow up: Serum BHCG - Day 4 and day 7; there should be a 15% fall in concentration with successful management.

Weekly BHCG until levels are undetectable.

Methotrexate treatment for Ectopic Pregnancy

The decision to treat with methotrexate must be made by the consultant responsible for the patient .Methotrexate is a cytotoxic preparation and therefore the WH cytotoxic policy must be followed.

Prescription:

Before prescribing, the decision to treat the patient with methotrexate must be confirmed with the patient's consultant Prescribed by gynaecology SpR on an inpatient chart and then contact paediatric and gynaecology pharmacist on bleep 3213.

Dose:

The medication is supplied in pre-filled syringes – 7.5mg, 10mg, 25mg, 50mg and 80mg.

Consequently doses are banded according to appropriate pre-filled syringes, based on a 50mg/m^2 dose.

To calculate dose the patient's surface area needs to be calculated as follows:

Body Surface area (m^2) =

square root of: (patient weight in kg) X (height (cm) / 3600

NB: There is a Surface area calculator in e-BNF (type in body surface area calculator) where you can just put in patients height (cm) and weight (kg)

http://www.medicinescomplete.com/mc/bnf/current/PHP18585-body-surface-area.htm

Alternatively you may ask the gynaecology and paediatric pharmacist to advise on bleep 3213.

Surface Area (m^2)	Dose (mg)	Pre-filled syringes supplied
1.50 – 1.57	75	1x 50mg 1x 25mg
1.58 – 1.69	80	1x 80mg
1.70 – 1.79	87.5	1x 80mg 1x7.5mg
1.80 – 1.89	90	1x 80mg 1x 10mg
1.90- 1.97	100	2x 50mg

Prescription check:

The prescription will be checked by the gynaecology pharmacist or someone deputising for them if they are not available. The pharmacist will check the patient s neutrophil count (>/= $1.5x10^9$/L) and platelet count (>/= 100 $x10^9$ /L)

Collection:

The medicine will not be delivered by porters, but should be collected from the pharmacy production office in the pharmacy by a nurse or doctor.

The medicine should be transported in a bag in accordance with WH cytotoxic policy

Administration:

Methotrexate is a cytotoxic given intramuscularly and should be handled with care in accordance with WH guidelines by a chemotherapy trained nurse or doctor. It should not be handled by pregnant staff.

Gloves- Hands must be washed thoroughly with liquid soap/detergent or alcohol gel before and after glove application.

Gloves must be worn at all times.

Gloves must:

- Always be disposable and preferably powder free
- Be worn at all times when contact with cytotoxic drugs is possible
- Be changed regularly, always between patients and immediately after they become damaged or contaminated.

Torso protection (Plastic aprons) - Disposable plastic aprons will provide limited protection and prevent absorption into clothing when used where splashing or spraying is possible

All aprons, gowns, gloves and disposable personal protective clothing should be disposed of according to the guideline, in a clinical waste bin unless used to clean up spillage.

Eye protection- The use of eye protection should be considered whenever splashes or sprays of cytotoxic drugs might be generated, for example clearing up cytotoxic spillages.

Eyewash kits and spillage kits must be readily at hand for use in all areas where handling of cytotoxic drugs occurs.

Eye protection:

- Should fully enclose the eyes and comply with BS EN166.
- Be disposable, where possible or capable of undergoing decontamination cleaning.

Disposal – Always use the small purple cytotoxic sharp bins when full (or at least 3 monthly, please return to pharmacy to be destroyed

Spillage – use the small spillage kit (personal protection equipment is inside). This can be obtained from pharmacy.

- **Contacts (inside and outside the Trust including out-of-hours contacts)**

Lead consultant for Women's Diagnostic Unit: Miss Vogt, Miss Wilson or Miss Flemming via switchboard.

Consultant on call via switch board.

Women's Diagnostic Unit 0207 288 3786

- **References (evidence upon which the guideline is based)**

-RCOG Green-top guideline 21 : The management of tubal pregnancy.

-Association of early pregnancy unit.

- BMJ June 2011

- **Compliance with this guideline (how and when the guideline will be monitored e.g. audit and which committee the results will be reported to) Please use the tool provided at the end of this template**

Standard 1	**Diagnoses of Ectopic pregnancy**	Assessment ASTRIA	Time frame
	How many confirmed ectopic pregnancies confirmed at the first scan?	Number =	Annual

Standard 2	**Treatment of Ectopic pregnancy**	Assessment Astria	Time frame
	How many women opted for surgical treatment? medical treatment? expectant management?	Numbers = = =	Annual

Standard 3	**Treatment of Ectopic pregnancy**	Assessment Astria	Time frame
	How many women required emergency surgery after presenting in the Womens' Diagnostic Unit (WDU)?	Number	Annual

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	**Does the procedural document affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	**Is there any evidence that some groups are affected differently?**	No	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the procedural document likely to be negative?**	No	
5.	**If so can the impact be avoided?**	N/A	
6.	**What alternatives are there to achieving the procedural document without the impact?**	N/A	
7.	**Can we reduce the impact by taking different action?**	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	**Title**		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	**Rationale**		
	Are reasons for development of the document stated?	Yes	
3.	**Development Process**		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4.	**Content**		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
5.	**Evidence Base**		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
6.	**Approval**		
	Does the document identify which committee/ group will approve it?	Yes	
7.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?	Yes	
8.	**Document Control**		
	Does the document identify where it will be held?	Yes	
9.	**Process to Monitor Compliance and Effectiveness**		

	Title of document being reviewed:	Yes/No	Comments
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	
	Is there a plan to review or audit compliance with the document?	Yes	
10.	**Review Date**		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

Executive Sponsor Approval			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
Relevant Committee Approval			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
Responsible Committee Approval – only applies to reviewed procedural documents with minor changes			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need complete a report ? How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	**Lead**	**Tool**	**Frequency**	**Reporting arrangements**
Number of confirmed ectopic pregnancies. Treatment options. Emergency surgery required.	Miss K. Vogt - Consultant Obstetrician and Gynaecologist	Astria and case notes	Annual audit	Report to the Gynaecological guideline group. Trust Clinical governance group.