

Guideline for the Management of Pelvic Inflammatory Disease Version 2	
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Guideline Sponsor	Clinical Director for Obstetrics & Gynaecology Services and Head of Midwifery Services
Lead Executive	Director of Nursing, Midwifery and Governance
Recommended by:	Maternity Guidelines Group
Date Approved:	13 th November 2013
Approved by:	Maternity Risk Management Group
Date Approved :	29 th January 2014
Author(s):	Consultant Obstetrician & Gynaecologist
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Target audience:	All staff working in Gynaecology Services
Document purpose	To provide comprehensive guidance on the management of pelvic inflammatory disease
Training requirements	No specific training requirements
Associated documents and Key References	BASHH UK National Guideline for the Management of Pelvic Inflammatory Disease 2011 (updated June 2011) www.evidence.nhs.uk
Financial Resource Implications	None Identified
Key words (to aid searching)	Pelvic infection, PID

Consultation, Communication and Implementation

Consultation Required	Authorised By	Date Authorised	Comments
Equality Impact Assessment completed	Patient and Workforce Equality Lead	Nov 2013	Low Impact
External Stakeholders	N/A		
Trust Staff Consultation via Intranet	Start date:	End Date:	

Describe the Implementation Plan for the Guideline (and guideline if impacts upon Guideline) (Considerations include; launch event, awareness sessions, communication / training via Divisions and other management structures, etc)	By Whom will this be Delivered?
Following ratification the guideline development midwife will ensure that the latest version of the guideline is uploaded onto the intranet into the Maternity and Gynaecology section. A hard copy will also be available in each clinical area. New staff will be made aware of all guidelines at induction. A list of activated guidelines is issued on a monthly basis and disseminated at the monthly managers and Team leader's meeting/individual ward meetings. These meetings also have feedback from the maternity risk management group who approve the guideline.	Guideline Development Midwife and Ward Managers/Team Leaders.

Monitoring Compliance with the Guideline

Describe Key Performance Indicators (KPIs)	How will the KPI be Monitored?	Which Committee will Monitor this KPI?	Frequency of Review	Lead
Compliance with the guideline	Audit of Compliance against KPI	Maternity Risk Management Group	3 Yearly	Delegated SHO

Performance Management of the Guideline

Who is Responsible for Producing Action Plans if KPIs are not met?	Which committee will monitor these action plans?	Frequency of Review (To be agreed by Committee)
A delegated SHO	Maternity Risk Management Group	3 yearly
How will Learning occur?	Who is responsible for implementing and disseminating learning information	Frequency
Dissemination of audit findings at the scheduled audit meetings, ward meetings, and other formal meetings. Maternity/CNST Newsletter to individuals as required. Summary of lessons shared within the Newsletters.	Guideline Development Midwife / Matrons / Ward Managers / Community Team Leaders / Lead Consultant Obstetrician for Risk Management	Monthly Meetings Quarterly Maternity/CNST Newsletters

Archiving including retrieval of archived document	By whom will Guideline be archived and retrieved
Archiving and retrieval will be in line with the Document Control Guideline	Senior Web Administrator
Prior to the process above all Maternity Policies and Guidelines were archived and retrieved from Trust Groups.	Guideline Development Midwife

Document Version History

Date	Author Designation	Summary of key changes
Nov 2009	1 Consultant Obstetrician & Gynaecologist	New Guideline
Jan 2014	2 Consultant Obstetrician & Gynaecologist	Reviewed and reformatted into the Trust Document Control Guideline Format

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Executive Summary

1. Guideline Aim

Is to provide evidence based guidance on the management of pelvic inflammatory disease.

2. Guideline Description

This guideline describes the condition of PID and the importance of diagnosing the condition early with consideration for any differential diagnosis. It describes the management in the inpatient and outpatient setting, treatment options and the follow up care recommended.

SECTION 1

1. Introduction

Pelvic inflammatory disease (PID) is usually the result of infection ascending from the endocervix causing endometritis, salpingitis, parametritis, oophoritis, tubo-ovarian abscess and/or pelvic peritonitis.

It is a common cause of morbidity and accounts for 1 in 60 General Practitioner (GP) consultations in women under the age of 45. Chlamydia trachomatis and Neisseria gonorrhoea have been identified as the main causative agents. *Mycoplasma genitalium* has also been associated with upper genital tract infection in women.

2. Guideline Objectives

- To provide evidence based care for the treatment of women with a diagnosis of Pelvic Inflammatory Disease.
- To ensure the consideration of a differential diagnosis when considering treating the patient for PID
- To give the treatment options for patients on an inpatient and outpatient basis.
- To ensure that women are given information about PID to prevent its reoccurrence if possible.
- To give guidance on the follow up of women with PID

3. Definitions

PID - Pelvic Inflammatory Disease

SECTION 2

4. Duties, Accountabilities and Responsibilities

4.1 Chief Executive

The Chief Executive has overall responsibility for the strategic and operational management of the Trust including and ensuring that this guideline complies with all legal, statutory and good practice guidance requirements and is implemented effectively and efficiently.

4.2 Director of Nursing, Midwifery and Governance

The Director of Nursing Midwifery and Governance is accountable to the Trust board for providing assurance of compliance with this Guideline in all parts of the Trust.

4.3 Clinical Director and the Obstetrics and Gynaecology Team

The Clinical Director and their team have primary responsibility for the care of women admitted to gynaecology services. The team will also communicate with other specialities when there is a clinical indication which requires this.

4.4 Directorate Manager

The Directorate Manager is accountable to the Trust Board for assuring compliance with this guideline within gynaecology services and ensuring that the guideline is reviewed and updated by the specified review dates.

4.5 Matron

The Matron within gynaecology services will be responsible for ensuring that when training requirements are stipulated in the guideline that these are fulfilled as specified in the Training Needs Analysis or provide ad hoc training sessions.

4.6 Ward Manager/Clinical Manager

The ward manager is responsible for ensuring that all staff working in their clinical areas are fully aware of their responsibilities within this guideline and any specific pathways that are available.

4.7 Gynaecology Nurses

All midwives have a responsibility to ensure that any new and revised guidelines are referred to during the course of their practice. Staff are aware that clinical guidelines are available on the intranet and in hard copy files in each clinical area.

5. Management of Pelvic Inflammatory Disease (PID)

5.1 Clinical features

5.1.1 Symptoms

The following features are suggestive of a diagnosis of PID:

- Bilateral lower abdominal pain
- Deep dyspareunia
- Abnormal vaginal bleeding, including post coital, inter-menstrual and Menorrhagia
- Abnormal vaginal or cervical discharge which is often purulent

5.1.2 Signs

- Bilateral lower abdominal tenderness
- Adnexal tenderness on bimanual vaginal examination
- Cervical motion tenderness on bimanual vaginal examination
- Fever ($>38^{\circ}\text{C}$)

A diagnosis of PID, and empirical antibiotic treatment, should be considered and usually offered in any young (under 25) sexually active woman who has recent onset, bilateral lower abdominal pain associated with local tenderness on bimanual vaginal examination after excluding pregnancy.

5.2 Complications

- The Fitz-Hugh-Curtis syndrome comprises right upper quadrant pain associated with perihepatitis which occurs in some women with PID.
- Removal of the IUD should be considered and may be associated with better short term clinical outcomes. The decision to remove the IUD needs to be balanced against the risk of pregnancy in those who have had unprotected intercourse in the preceding 7 days. Hormonal emergency contraception may be appropriate for some women in this situation.

5.3 Diagnosis

- PID may be symptomatic or asymptomatic.
- Testing for gonorrhoea and chlamydia in the lower genital tract is recommended since a positive result supports the diagnosis of PID.
- An elevated ESR or C reactive protein also supports the diagnosis but is non-specific.

- The **absence** of endocervical or vaginal pus cells has a good negative predictive value (95%) for a diagnosis of PID but their **presence** is non-specific (poor positive predictive value – 17%).

5.4 Differential diagnosis

- Ectopic pregnancy – pregnancy should be excluded in all women suspected of having PID
- Acute appendicitis – nausea and vomiting occurs in most patients with appendicitis but only 50% of those with PID. Cervical movement pain will occur in about a quarter of women with appendicitis
- Acute exacerbation endometriosis – the relationship between symptoms and the menstrual cycle may be helpful in establishing a diagnosis.
- Irritable bowel syndrome
- Complications of ovarian cyst e.g. rupture, torsion
- Urinary tract infection
- Constipation

5.5 Investigations

- Full blood count, C reactive protein
- Urine Pregnancy test
- Cervical swabs for Gonococci (plain transport medium) and Chlamydia
- Pelvic ultrasound (if suspicion of mass)
- Blood cultures (if systemically unwell)
- Screening for sexually transmitted infections including HIV should be considered

5.6 Management

- Delay in treatment increases the risk of long term sequelae such as ectopic pregnancy, infertility and pelvic pain.
- **A low threshold for empiric treatment of PID is recommended**

5.6.1 General Advice

- Appropriate analgesia should be provided.
- Intravenous therapy is recommended for patients with more severe clinical disease e.g. pyrexia > 38C, clinical signs of tubo-ovarian abscess, signs of pelvic peritonitis.
- Patients should be advised to avoid unprotected intercourse until they, and their partner(s), have completed treatment and follow-up.

- Outpatient therapy is as effective as inpatient treatment for patients with clinically mild to moderate PID. Admission for parenteral therapy should be considered in following situations:

:

- Lack of response to oral therapy
- Clinically severe disease
- Presence of a tubo-ovarian abscess
- Intolerance to oral therapy
- Pregnancy

5.6.2 Treatment

Outpatient Regimens

i.m. ceftriaxone 500mg single dose
followed by
oral doxycycline 100mg twice daily
plus metronidazole 400mg twice daily for 14 days

Inpatient Regimens

Intravenous therapy should be continued until 24 hours after clinical improvement and then switched to oral.

Ceftriaxone 2g IV once daily to be continued until 24 hours after clinical improvement

AND

Metronidazole IV 500 mg 8 hourly AND oral doxycycline 100 mg 12 hourly for a total of 14 days.

Change to oral metronidazole 400mg 12 hourly 24 hours after clinical improvement.

If patient unable to tolerate oral treatment, use clarithromycin 500mg IV 12 hourly.

If pregnant patient, substitute erythromycin 500mg 6 hourly for doxycycline in the above regime.

If severe penicillin allergy discuss with Microbiology.

5.7 Pregnancy and Breastfeeding

Doxycycline changed for Erythromycin 500mg qds in pregnancy for 14 days.

5.8 Surgical Management

- Laparoscopy may help early resolution of the disease by dividing adhesions and draining pelvic abscesses
- Laparotomy and drainage of tubo –ovarian abscess is also an option.

5.9 Information for the patient should include the following:

- After treatment, fertility is usually maintained but there is a risk of future infertility, chronic pelvic pain or ectopic pregnancy
- Severe disease is associated with increased risk of sequelae
- Repeat episodes of PID increase in the risk of infertility
- Future use of barrier contraception can reduce the risk of PID
- There is a need to screen her sexual contacts for infection to prevent her becoming re-infected.
- Partners should be advised to avoid intercourse until they and the index patient have completed the treatment course.
- Advice should be given for partners to undergo screening in the Genito-Urinary Medicine (GUM) Clinic.

A suitable leaflet for PID is available at [http://www.rcog.org.uk/files/rcog-corp/Acute%20Pelvic%20Inflammatory%20Disease%20\(PID\)_0.pdf](http://www.rcog.org.uk/files/rcog-corp/Acute%20Pelvic%20Inflammatory%20Disease%20(PID)_0.pdf)

5.10 Follow Up

- After 48hrs -Swab result should be checked and changes made to antibiotics if required.
- After 72 hours review of clinical symptoms and signs is done to decide the need for further investigation, parenteral therapy and/or surgical intervention.
- Review 2-4 weeks after therapy may be useful to ensure:
 - Response to treatment
 - Compliance with oral antibiotics

- Screening and treatment of sexual contacts
- Awareness of the significance of PID and its sequelae
- Repeat pregnancy test, if clinically indicated
- Repeat testing for gonorrhoea or chlamydia after 2 to 4 weeks can be done for persisting symptoms.

6. Equality Analysis

This document aims to design and implement, services and procedures, that meet the diverse needs of our population and workforce, ensuring that none of these are placed at a disadvantage over others in issues of race, ethnic origin, nationality, gender, culture, religion or belief, sexual orientation or age.

Equality Analysis Stage 1 Screening			
1	Title of Guideline:	Guideline for the Management of Pelvic Inflammatory Disease	
2	Guideline Author(s):	Consultant Obstetrician & Gynaecologist	
3	Lead Executive:	Director of Nursing, Midwifery and Governance	
4	Guideline Sponsor	Clinical Director for Obstetrics & Gynaecology Services and Head of Midwifery Services	
5	Target Audience	Midwives and doctors working in gynaecology services	
6	Document Purpose:	To facilitate the delivery of a high standard of care to service users by providing comprehensive guidance on the management of pelvic inflammatory disease	
7	Please state how the Guideline is relevant to the Trusts general equality duties to: <ul style="list-style-type: none"> eliminate discrimination advance equality of opportunity foster good relations 	Enables the identification and sharing of best practice, and also areas where improvement is needed to increase the overall quality of care and services.	
8	List key groups involved or to be involved in Guideline development (e.g. staff side reps, service users, partner agencies) and how these groups will be engaged		
<i>NB Having read the guidance notes provided when assessing the questions below you must consider;</i> <ul style="list-style-type: none"> Be very conscious of any indirect or unintentional outcomes of a potentially discriminatory nature Will the Guideline create any problems or barriers to any protected group? Will any protected group be excluded because of the Guideline? Will the Guideline have a negative impact on community relations? If in any doubt please consult with the Patient and Workforce Equality Lead			
9	Does the Guideline significantly affect one group less or more favourably than another on the basis of: answer 'Yes/No' (please add any qualification or explanation to your answer particularly if you answer yes)		
		Yes/No	Comments/ Rationale

	• Race/ethnicity	NO	
	• Disability (includes Learning Disability, physical or mental disability and sensory impairment)	NO	
	• Gender	NO	
	• Religion/belief (including non-belief)	NO	
	• Sexual orientation	NO	
	• Age	NO	
	• Gender reassignment	NO	
	• Pregnancy and Maternity	NO	
	• Marriage and Civil partnership	NO	
	• Carer status	NO	
10	Will the Guideline affect the Human Rights of any of the above-protected groups?	NO	
11	If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable?	n/a	
12	If you have identified a negative impact on any of the above-protected groups, can the impact be avoided or reduced by taking different action?	n/a	
13	How will the effect of the Guideline be reviewed after implementation?	This guideline will be audited every three years in line with the Key Performance Indicators.	
<p>If you have entered yes in any of the above boxes you must contact the Patient and Workforce Equality Lead (ext 7609/ Annette.craghill@sthk.nhs.uk) to discuss the outcome and ascertain whether a Stage 2 Equality Analysis Assessment must be completed.</p>			
Name of manager completing assessment: (must one of the authors)		Mrs S Rao	
Job Title of Manager completing assessment		Consultant Obstetric Lead for Bleeding in Early Pregnancy Services	
Date of Completion:		November 2013	

7. Training

No specific training requirements.