Sepsis Predisposition & Recognition

(ALWAYS USE CLINICAL JUDGEMENT)

There are separate sepsis criteria for non-pregnant adult patients

RECOGNISE SEPSIS · ENHANCE SURVIVAL

MATERNITY PATIENTS

Complete this form and apply if there is a clinical suspicion of infection.

I

Section 1:

Midwife Name:

Midwife Signature:

NMBI PIN:

IMEWS:

Date: Time:

Patient label here

Maternal Sepsis is a life-threatening condition defined as organ dysfunction resulting from infection during pregnancy, childbirth, post-abortion or postpartum period (WHO 2016).

S

Section 2: Are you concerned that the woman could have infection

- ☐ History of fevers or rigors
- ☐ Cough/sputum/breathlessness
- ☐ Flu like symptoms
- ☐ Unexplained abdominal pain/distension
- ☐ Pelvic pain
- ☐ Vomiting and/or diarrhoea
- ☐ Line associated infection/redness/swelling/pain
- ☐ Possible intrauterine infection
- ☐ Myalgia/back pain/general malaise/headache
- ☐ New onset of confusion
- ☐ Cellulitis/wound infection/perineal infection
- ☐ Possible breast infection
- ☐ Multiple presentation with non-specific malaise
- ☐ Others

B

Section 3: Obstetric History

Para:

Gestation:

Pregnancy related complaints:

Days post-natal:

Delivery:

- ☐ Spontaneous vaginal delivery (SVD)
- ☐ Vacuum assisted delivery
- ☐ Forceps assisted delivery
- ☐ Cesarean section

Risk factors

Pregnancy Related

- ☐ Cerclage
- ☐ Pre-term/prolonged rupture of membranes
- ☐ Retained products
- ☐ History pelvic infection
- ☐ Group A Strep. infection in close contact
- ☐ Recent amniocentesis

Non Pregnancy Related

- ☐ Age > 35 years
- ☐ Minority ethnic group
- ☐ Vulnerable socio-economic background
- ☐ Obesity
- ☐ Diabetes, including gestational diabetes
- ☐ Recent surgery
- ☐ Symptoms of infection in the past week
- ☐ Immunocompromised e.g. Systemic Lupus
- ☐ Chronic renal failure
- ☐ Chronic liver failure
- ☐ Chronic heart failure

Record observations on the Irish Maternity Early Warning (IMEWS) chart.

Request immediate medical review
if you are concerned the woman has INFECTION plus ANY 1 of the following:

A

Section 4:

1. ☐ IMEWS trigger for immediate review, i.e. **>2 YELLOWS** or **≥2 PINKS**
2. ☐ SIRS Response, i.e. ≥2 modified SIRS criteria listed below.

   Modified SIRS criteria: Note - physiological changes must be sustained ≥30mins

   - ☐ Respiratory rate ≥ 20 breaths/min
   - ☐ Heart rate ≥ 100bpm
   - ☐ Fetal heart rate >160bpm
   - ☐ WCC < 4 or > 16.9 x 10^9/L
   - ☐ Temperature <36^0 or ≥ 38^0C
   - ☐ Acutely altered mental status
   - ☐ Bedside glucose > 7.7mmol/L *(in the absence of diabetes mellitus)*
3. ☐ At risk of neutropenia, e.g. on anti-cancer treatment.

R

Section 5:

If sepsis is suspected following screening, escalate to Medical review. Use ISBAR as outlined.

Doctor's Name: **Time Doctor Contacted:**

Midwife's Signature:

Sepsis Form - Maternity

(ALWAYS USE CLINICAL JUDGEMENT)

There are separate sepsis criteria for non-pregnant adult patients

RECOGNISE SEPSIS • ENHANCE SURVIVAL

If infection suspected following History and Examination, Doctor to complete and sign sepsis screening form

Section 6: Clinical Suspicion of Infection

Document site:

☐ Genital Tract ☐ Urinary Tract ☐ Skin
☐ Respiratory Tract ☐ Intra-abdominal ☐ Catheter/Device Related
☐ Central Nervous System ☐ Intra-articular/Bone ☐ Unknown
☐ Other suspected site:

☐ **No clinical suspicion of INFECTION**: proceed to section 9.

Section 7: Who needs to get the "Sepsis 6" – infection plus any one of the following:

1. ☐ SIRS Response, i.e. ≥2 modified SIRS criteria listed on page 1.
2. ☐ Clinically or biochemically apparent new onset organ dysfunction, any one of the following:
   ☐ Acutely altered mental state ☐ RR > 30 ☐ O_2 sat < 90% ☐ HR > 130
   ☐ Oligo or anuria ☐ Pallor/mottling with prolonged capillary refill ☐ SBP < 100
   ☐ Non-blanching rash ☐ Other organ dysfunction
3. ☐ Patients who present unwell who are at risk of neutropenia, e.g. on anti-cancer treatment.

☐ **YES. Start Maternal Sepsis 6 + 1** Time Zero:

Section 8 — TAKE 3 — SEPSIS 6 + 1* – complete *within 1 hour* — GIVE 3

☐ **BLOOD CULTURES:** Take blood cultures before giving antimicrobials (if no significant delay i.e. >45 minutes) and other cultures as per examination.

☐ **BLOODS:** Check point of care lactate & full blood count, U&E +/- LFTs +/- Coag. Other tests and investigations as per history and examination. Other test and investigations and source control as indicated by history and examination.

☐ **URINE OUTPUT:** Assess urine output and consider urinary catheterisation for hourly measurement in sepsis/septic shock.

***+1 If Pregnant, Assess Fetal Wellbeing** ☐

☐ **OXYGEN:** Titrate O_2 to saturations of 94 -98% or 88-92% in chronic lung disease. **N/A** ☐

☐ **FLUIDS:** Start IV fluid resuscitation if evidence of hypovolaemia. 500ml bolus of isotonic crystalloid over 15mins & give up to 2 litres, reassessing for signs of hypovolaemia, normovolaemia, or fluid overload. Caution in pre-eclampsia. **N/A** ☐

☐ **ANTIMICROBIALS:** Give IV antimicrobials according to the site of infection and following local antimicrobial guidelines.

Type: Dose: Time given:
Type: Dose: Time given:
Type: Dose: Time given:

Laboratory tests should be requested as EMERGENCY aiming to have results available and *reviewed within 1 hour*

Section 9

Following history and examination, and in the absence of clinical criteria or signs. Sepsis 6 is not commenced. If infection is diagnosed, proceed with usual treatment pathway for that infection.

☐ **NO.** Doctor's Name: Date: Time:

Section 10: Look for signs of new organ dysfunction - any one is sufficient:

- ☐ Lactate > 2 mmol/L (following adequate initial fluid resuscitation, typically 30mls/kg in the first hour unless fluid intolerant)
- ☐ Cardiovascular - Systolic BP < 90 or Mean Arterial Pressure (MAP) < 65 or Systolic BP more than 40 below patient's normal
- ☐ Respiratory - New or increased need for oxygen to achieve saturation > 90% (note: this is a definition, not the target)
- ☐ Renal - Creatinine > 170 micromol/L **or** Urine output < 500mls/24 hrs – despite adequate fluid resuscitation
- ☐ Liver - Bilirubin > 32 micromol/L
- ☐ Haematological - Platelets < 100 x 10^9/L
- ☐ Central Nervous System - Acutely altered mental status

One or more new organ dysfunction due to infection:

☐ **This is SEPSIS.** Inform Registrar, Consultant and Anaesthetics immediately. Reassess frequently in 1st hour. Consider other investigations and management +/- source control if patient does not respond to initial therapy as evidenced by haemodynamic stabilisation then improvement.

No new organ dysfunction due to infection:

☐ **This is NOT SEPSIS**: If infection is diagnosed proceed with usual treatment pathway for that infection.

Section 11: Look for signs of septic shock

(following adequate initial fluid resuscitation, typically 2 litres in the first hour unless fluid intolerant)

AND

☐ Requiring inotropes/pressors to maintain MAP ≥ 65

☐ **This is SEPTIC SHOCK**

☐ Inform consultant

☐ Contact CRITICAL CARE/Anaesthesia

Pathway Modification

All Pathway modifications need to be agreed by the Hospital's Sepsis Steering Committee and be in line with the National Clinical Guideline No 6 Sepsis Management.

Section 12 — Clinical Handover. Use ISBAR$_3$ Communication Tool

This section only applies when handover occurs before the form is completed and is then signed off by the receiving doctor.

Doctor's Name (PRINT): Doctor's Signature: **Doctor's Initials** **MCRN**

Patient care handed over to: Time: Sections completed:

File this document in patient notes - Document management plan.

Doctor's Name: **Doctor's Signature:** **MCRN:** **Date:** **Time:**