Introduction to the Labour Ward at St Mary's Hospital

The Maternity Unit at St Mary's has a delivery rate of approximately 4,000 deliveries per year. There is a 24-hour epidural service available and a Caesarean section rate of approximately 30%. With the largest recurrent miscarriage clinic in the UK the unit caters for high-risk pregnancies and deliveries from 27/40 gestation.

Please read the following and familiarise yourself with the Labour Ward before your first oncall

Orientation

The maternity unit is situated in the Clarence Memorial and Cambridge Wings and includes:

Labour ward (on 1st floor)

The maternity unit is situated in the Clarence Memorial and Cambridge Wings and includes:

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Alec Bourne 1 (labour ward)
1st floor Clarence Memorial Wing
Labour rooms – 4 to 12 (main corridor)
Pool room 5
HDU/Recovery (4 beds)
2 Theatres
Day assessment unit

Alec Bourne 2 (antenatal and post natal ward)
2nd floor Clarence Memorial Wing
East and West Wing

Birthing Unit (Ground floor Clarence Wing)
Ground floor Cambridge Wing
Midwifery Lead

Location of equipment on labour ward

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidural trolley</td>
<td>In store cupboard</td>
</tr>
<tr>
<td>Airway equipment</td>
<td>Trolley in LW Theatre 1 (including GlideScope)</td>
</tr>
<tr>
<td>Resus trolley</td>
<td>Outside birthing room 7</td>
</tr>
<tr>
<td>PET trolley</td>
<td>Outside birthing room 7</td>
</tr>
<tr>
<td>Oxford HELP mattress</td>
<td>In store room opposite LW Theatre 1</td>
</tr>
<tr>
<td>Level 1 infuser</td>
<td>In store room opposite LW Theatre 1</td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
</tr>
<tr>
<td>Anaesthetic drugs</td>
<td>Cupboards and fridge in LW Theatre 1</td>
</tr>
</tbody>
</table>

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Controlled drugs | Main pharmacy on labour ward (midwife in charge has key)
---|---
**Blood** | 2 Units of O-ve blood are kept in blood fridge on labour ward
**Malignant hyperthermia box** | Above iv fluids shelves in theatre 1
**20% Intralipid** | In drug fridge in theatre 1

### Useful contact numbers

**Anaesthetic team**
- Anaesthetic SR 1201
- Anaesthetic SHO 1213
- ITU SpR 1212
- LW ODP 1672

**Obstetricians**
- Obstetric SR 2099
- Obstetric SpR 1101
- Obstetric SHO 2100

### Paper work

- Epidural proforma – to be completed for all labour epidurals. This is not a prescription (this is on Cerner) but to record midwife top-ups/observations during labour.
- **BLACK** labour ward diary – ALL procedures/interventions to be recorded here/hand written.
  - Place patient sticker in notes
- SAFER handover proforma - complete at each handover (08:00, 17:00 and 20.00) and file in folder
- Stickers for consent, follow-up and post-op analgesia
- Standard blue anaesthetic charts for theatre procedures
- PDPH folder (see later)

### Cerner

- Document labour epidurals and theatre spinals/CSEs on Cerner
- Go to Maternity Whiteboard -SMH labour ward- right click on patient- open pregnancy view – structured notes- Type (anaesthetics) – Title (epidural procedure note)
- Template can be modified /personalized and saved to favourites
- Prescribe 0.1% levobupivacaine + 2mcg/ml fentanyl top-up(low dose epidural solution)
  - 10-15 mls every 30mins
- Analgesia following Caesarean section
  - Use Caesarean section prescription careset for all patients which will default to the following
    - Enoxaparin 40mg s/c at bedtime (22:00)
    - Paracetamol 6hrly
    - Diclofenac suppositories 100mg (2 doses 12hrly post –op). You will need to modify the start time of the next dose to follow on from 1st dose in theatre otherwise Cerner will default and prescribe for the next available dosing slot (8,12,18,22) which may be too soon. Please do not chart analgesia for any times outside of agreed standard dosing times (8,12,18,22) or they get missed

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Ibuprofen 600mgs qds (defaults to tds after 3 days). Remember to modify 1st oral dose to commence 10hours after 3rd dose of PR diclofenac
Dihydrocodeine 30mg qds

Prn
Dihydrocodeine 30mg 6hr
Morphine sulphate 10-20mg 2hrly

*Please make sure you are happy with Cerner and prescribing before you are oncall

**Daily activities on labour ward**

**Shifts:**
Day shift: 08:00 - 17:00
Long day: 17:00 - 20:00
Night: 20:00 - 08:00

**Handover:**
Anaesthetic takes place daily at 08:00am and 17:00 and 20:00.
At morning handover please DO NOT handover the bleep (1211) to a CT2 (who is often covering the day) unless you have confirmed that the consultant for the day is ON SITE and contactable.

Handover should take place on Labour Ward using the SAFER proforma.

Obstetric handover takes place at 08:30, 13:00, 17:00 and 20:00. These may be either ward and/or board rounds. Please make every effort to attend unless you are in theatre.

**Ward rounds**
- Visit rooms with epidurals running to identify any problems early.
- Review ALL patients in recovery/ HDU with obstetric team
- At 24:00 jointly review ALL HDU patients requiring level 2 care with the obstetric registrar and to agree plan overnight eg: iv fluid management

**Elective sections**
There are currently 2 dedicated elective section lists per week (Tues & Wed mornings) These are staffed by a separate consultant anaesthetist and obstetrician. These are low risk, rapid turnover cases but junior trainees may be able to perform the blocks, labour ward permitting. Other elective work is spaced out over the week and fitted around emergency work (average 2-3 per day)
All women for elective Caesarean should:
- Arrive starved at 07:30am
- Receive premedication with ranitidine and metoclopramide
- Have a recent FBC and active G&S (please check)

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• Have routine CTG before going to theatre

NB: Twins - If two good CTG trace readings are not possible, despite following “twin guidelines” and cannot be confirmed by ultrasound then delivery needs to be expedited.

Please do not undertake any elective work out of hours without checking with the consultant oncall.

Follow ups
During quiet periods please make an effort to review patients who have had anaesthetic input in the previous 24 hours. Every patient who has an anaesthetic intervention should receive follow up in the 1st 24 hours. Use routine follow-up stickers and place in diary next to patient’s original procedure

PDPH
Document follow-ups on proforma in PDPH folder. Women should be reviewed 12hourly as inpatient and followed up by telephone for 3 days once discharged. Document on Cerner. Remember to hand over on SAFER.
Information sheet and contact numbers to be given to patient on discharge and post/fax letter (proforma) to GP
Arrange follow up in Dr Ward’s high risk clinic (book with antenatal clinic) for 6 weeks

Supervision on labour ward

In hours (8am-5pm):
Weekly anaesthetic consultant labour ward rota:

Monday Dr Glenn Arnold/ Dr Rachel Bartlett
Tuesday Dr Shelley Ward (Dr Rachel Bartlett – elective list)
Wednesday Dr Jo Bray (Dr Ben Graham – elective list)
Thursday Dr Soo Lim/Dr Natalie Courtois (am) and Dr Mark Sacks (pm)(alternate weeks
Friday Dr Andzrej Conn

High risk anaesthetic clinic run by Shelley Ward on Wednesday am in gynae outpatients

Out of hours (5pm-8am):
On call anaesthetic consultant (distant supervision)
• 5pm-9pm 2nd on consultant
• 9pm-8am 1st on consultant

Indications for calling consultant
General:
• If you are making an ITU referral and there is any bed related issue
• If you feel you need senior advice about anything
• IF you need an extra pair of hands

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Specific:
- Severe sepsis
- Suspected epidural haematoma
- Difficulties in performing regional anesthesia in Category 1 or 2 emergency sections
  Repeated attempts (>3) are discouraged and should be escalated to consultant oncall or most
  senior anaesthetist in the hospital if out of hours

Policies/Guidelines

Summarised below are some of the SMH maternity policies/guidelines. This is not an inclusive list! Full
guidelines may be found on the hospital intranet in the Imperial Maternity Policies and Procedures
section. Please read these before your first oncall.

Accidental dural puncture

Signs and symptoms
Headaches are common after labour and not all headaches are dural puncture related. However,
any woman suffering headache post-labour and anaesthetic intervention should have it excluded.
A spinal headache is characterised classically by a throbbing frontal or retro-bulbar pain which is
relieved by lying flat and IVC compression and worsened by sitting or standing, it may be
accompanied by occipital pain, neck-ache and tinnitus. However, all sorts of neurological
symptoms have been ascribed to Dural tap and cured by blood patching, therefore an atypical
presentation may well occur.

Management at time of puncture
Treatment of a dural puncture begins at the time of the puncture:
- Inform patient and midwife that a dural puncture has occurred.
- After dural puncture DO NOT pull out the Tuohy needle-Try not to drain more than a few
  mls of CSF (cerebral spinal fluid). Consider threading epidural catheter into the sub-arachnoid
  space (if safe).
- Approximately 2cm should be threaded into the sub-arachnoid space.
- Label as spinal catheter.
- Each top-up should be done by the anaesthetist
- Top-up doses are 2-3 ml of the standard low-dose mixture in incremental doses. Remember the
dead space in the catheter and filter is 1 ml.
- After delivery remove catheter as usual
- If the Tuohy needle is withdrawn, reite the epidural a space higher or lower (this may be the
  preferred option)
- Treat as a normal epidural, but each top-up should be given by the anaesthetist. REMEMBER
  EACH DOSE IS A TEST DOSE
- There is no indication for assisted instrumental delivery
- The Consultant Obstetric Anaesthetist must be informed ASAP (in working hours)
- Enter the women’s details into the ‘high risk/follow up’ folder on labour ward (St Mary’s)
• If there is any doubt whether the fluid seen flowing back through the epidural needle is CSF or saline, the temperature can be assessed on the back of the anaesthetist's hand (with gloves removed), and other tests can be performed using a urine dipstick (see full guideline for details).

Anti-infective use in pregnancy and breastfeeding
• Antibiotics for Caesarean section
  1.5g cefuroxime and 500mg metronidazole iv over 10mins. Give after regional but before delivery of baby. In penicillin allergy give 900mg clindamycin and 5mg/kg gentamicin (run together in 100mls bag of saline)
• A full guideline for antimicrobial use is available on the intranet.

Regional analgesia in obstetrics
• Requests for analgesia should be met as soon as possible and time from request for analgesia to the anaesthetist attending should not exceed 30 minutes (OAA guideline).
• If you anticipate that your response time will be longer than 30-60 minutes please attempt to find an alternative anaesthetist to attend the patient or ask the midwife to do so.
• CTG monitoring throughout.
• Labour ward ODP is available to assist with difficult epidurals out of hours if you ask

CSE versus Epidural
• There are two methods for producing analgesia:
  1. A Combined Spinal Epidural (CSE) needle-through-needle technique may be used. Initial rapid analgesia (including excellent sacral analgesia) is provided by the spinal injection of 2.5 milligrams of levobupivacaine and 25 micrograms fentanyl - the spinal injection provides approximately 90 minutes of analgesia. Epidural top-ups of “low dose” 0.1% levobupivacaine + fentanyl 2 micrograms per ml can then be used.
  2. A standard epidural can be sited in the usual way (i.e. without the spinal). Top-ups can then be provided, by using the “low dose mixture” : 0.1% levobupivacaine with 2 micrograms per ml of fentanyl . The first test dose should be an initial 10mls followed by a further 5-10mls at 5 mins of the low dose mixture. Further 10-15mls low dose top-ups should be charted every 30 mins PRN.

Patchy, Missed segment, unilateral block
  1. Alter position of woman and or withdraw catheter one or two centimetres, maintaining sterility. This is indicated with a unilateral block (which most “patchy” blocks are).
  2. Give up to 20mls bolus top-up of the low dose mixture.
  3. Try additional volume: 10 mls of 0.9% sodium chloride and additional opiate: 50 micrograms fentanyl.
  4. If these don’t work, don’t persist, re-site it. DO NOT use 0.25% levobupivacaine as this will not help the unblocked segments but will convert the already blocked area from analgesia to anaesthesia with associated motor weakness.

Top-ups for instrumental deliveries

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• The anaesthetist should be present during ANY delivery that cannot be managed safely by the midwife and/or difficulties are anticipated.
• For instrumentals in the room: If the existing block has been working well and there is not a great degree of urgency, 15-20 mls of the top-up solution: 0.1% levobupivacaine + fentanyl 2 micrograms per ml + / -extra fentanyl (50-100micrograms) will be effective.
• For instrumentals in theatre: Fast mix solution should be used (see below). This should only be given by the anaesthetist with full monitoring.

Fast Mix:
• 20 ml preservative-free lidocaine 2% + 2 ml preservative-free sodium bicarbonate 8.4% gently agitate and discard 2 mls then add + 0.1 ml adrenaline 1 : 1000.
## Hypertension in pregnancy

### VII. Table 5: Diagnosis and management of severe hypertension: Antihypertensive treatment options

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1 | **Communicate**  
- LW co-ordinator  
- Consultant Obstetrician  
- Consultant Anaesthetist  
- Neonatal team  |
| 2 | **Initiate severe PET protocol**  
- Magnesium and fluid restriction if decision made to deliver  |
| 3 | **Start treatment with one of 3 antihypertensive treatment options of equal preference depending on clinical situation and clinician’s preference**  |
| 4 | **Labetalol**  
- 200mg po stat (prior to or in absence of IV access) or IV 50mg bolus (CI < 90 mmHg, pulmonary oedema)  
- Give IV 50mg bolus slowly over 5 minutes  
- 1 bolus by 40-80mg every 10 mins to a max of 200mg  |
| 5 | **Hydralazine**  
- Give hydralazine 5mg IV as slow bolus over 1-2 minutes. Preload antenatal women (NOT if pulmonary oedema) with crystalloid up to 500ml IV before/at the time of 1st IV bolus. Repeat every 20 mins to a max of 15mg (3 doses) as long as no side effects – see below  |
| 6 | **Nifedipine**  
- 10mg po stat (not sublingual)  |
| 7 | **If decision has been made to deliver**  |
| 8 | **Labetalol maintenance infusion**  
- 20mg/hr doubling every 30 mins to a max of 160mg/hr  
- Dilute 200mg labetalol up to 50mls with NaCl 0.9% Start the infusion at 40mg/hour, doubling every 30 mins to a max of 160mg/hr  
STOP if:  
- Diastolic < 90 mmHg  
- Heart rate < 60 bpm  |
| 9 | **If BP ≥160/110 after 30 mins give further 10mg nifedipine po stat**  |
| 10 | **Hydralazine maintenance infusion**  
- If repeated boluses still needed after successful treatment using first three treatment boluses – infusions very rarely needed  
- 80mg hydralazine to be made up to 80mls with NaCl 0.9% (1mg/ml). Run infusion at 1.5mg/hr, and ↑ by 1.5mg/hr every 15 mins as required to a max of 9mg/hr  
STOP if:  
- Diastolic < 60 mmHg  
- Heart rate ≥ 120  
- Significant SE: headache, flushing  |
| 11 | **If BP not controlled on labetalol or if side effects, change to nifedipine, or if decision to deliver change to hydralazine**  |
| 12 | **If BP ≥160/110 commence either IV labetalol or IV hydralazine - starting with bolus dose first**  |
| 13 | **If BP not controlled on hydralazine or if side effects change to labetalol or nifedipine**  |
| 14 | Deliver if indicated or start long-term oral antihypertensive therapy  
Decide mode of birth according to clinical circumstances and woman’s preference  
Regional anaesthesia is appropriate if platelets > 80 x 10^9/L  |
VIII. Table 6: Management of severe hypertension: assessment, diagnosis and fluid balance

BP ≥ 160/110

Initiate severe PET protocol and admit to LW/HDU

Communicate and inform:
- LW co-ordinator
- Consultant obstetrician
- Consultant anaesthetist
- Neonatal team

IV access
- Continuous CTG
- BP every 15 mins
- Fluid in/out
- Bloods 4+12 hourly
- Use MEOWS chart
- NBM
- Ranitidine 150mg po+
- Metoclopramide 10mg po

Give seizure prophylaxis in all women with severe PET once decision made to deliver
Automated BP devices may underestimate BP
Initiate antihypertensive treatment (see table 5)

FLUID BALANCE

General measures:
- Record fluid balance hourly
- Total input (including all infusions) = 80ml/hr
- Use crystalloid e.g. Hartmanns

If urine output < 100ml/4hr:
- Get senior obstetric + anaesthetic review
- Consider 200ml fluid challenge
- Monitor USE’s

Indication for a CVP line:
- Oliguria (<100ml/4hrs) with impaired renal function
- Oliguria with pulmonary oedema
- Suspected hypovolaemia which fails to response to a fluid challenge
- Severe blood loss
- Difficulty in establishing ongoing IV access

Initiate protocol if:
- Sustained BP ≥ 160/110
- Eclampsia
- Severe PET (requiring delivery)
- Deteriorating clinical/blood picture
- HELLP

Stop any anticoagulation/antiplatelet treatment e.g. aspirin, tinzaparin
IX. Table 7 – Management of severe hypertension: Eclampsia:

Seizure prophylaxis and treatment

**ECLAMPSIA**

- **Get HELP**
  - LW co-ordinator
  - Obs SPR
  - Anaesthetic SPR
  - Consultant obstetrician
  - Consultant anaesthetist
  - Neonatal team

- **Woman at risk of fitting**
  - BP ≥ 160/110 and or one of the following:
    - Severe headache
    - Visual disturbances
    - Epi gastric pain
    - RUQ tenderness
    - Sustained clonus
    - HELLP syndrome
    - Platelets < 100 x 10^9/L
    - Abnormal LFT's

- **Decision to deliver** based on maternal + fetal assessment

**Monitor**

- Cardiac monitoring
- RR (aim for > 16 min)
- UO (aim for > 25ml/hr)
- Patellar/Biceps reflexes

- **Signs of toxicity**:
  - Loss of deep tendon reflexes
  - Respiratory arrest
  - Cardiac arrest

- **If seizures recur despite MgSO4**
  - 2g MgSO4 IV bolus over 5mins (withdraw 2g = 20ml of 1g in 10ml)
  - Ensure Joint obs/anaes management
  - If refits again consider diazepam 10-20mg IV or preferably intubation to control seizures and protect airway
  - Consider CT head once stops fitting

- **Withhold further doses until above normal**
  - Send urgent MgSO4 level to lab
  - Treat significant resp.depression with 1g Calcium gluconate (10mls 10% IV) over 10mins
Major obstetric haemorrhage

### Major Obstetric Haemorrhage Protocol

**Actual or anticipated loss of >20% blood volume (approx 1500mls in average pregnant woman) within 3 hours or 150ml/min**

Call 2222. State "Major Haemorrhage". Give Hospital and Location

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Hours</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARING CROSS</td>
<td>Monday-Friday 9am-5pm</td>
<td>Ext. 17112 / Bleep 8160</td>
</tr>
<tr>
<td>HAMMERSMITH</td>
<td>Monday-Friday 9am-5pm</td>
<td>Ext. 34772 / Bleep 3122</td>
</tr>
<tr>
<td>ST MARY'S</td>
<td>Monday-Friday 9am-5pm</td>
<td>Ext. 22043 / Ext. 21157 / Bleep 1611</td>
</tr>
</tbody>
</table>

**Information needed by the Blood Transfusion Laboratory**
- Major haemorrhage protocol being activated
- Patient Identification – Hospital/A&E Number, name & date of birth (unknown if in A&E)
- Patient location
- Name and contact details of person activating protocol for ongoing communication
- Cause of bleeding
- How urgently (in minutes) until blood is needed at the bedside
- Group & screen, full blood count & coagulation screen samples being sent

The Blood Transfusion Laboratory will issue -

- **Immediately:**
  - Emergency O negative blood 2 units maximum (if required)
  - OR 5 units of group specific blood (begin with O negative if no blood group known)
  - OR 6 units crossmatched blood - if currently valid sample available
  - 4 units of FFP aiming to administer 1.5 RBC : 1 FFP

Once these components are collected from the laboratory
- A further 6 units of blood and 4 units of FFP will automatically be prepared and made available for issue

At this stage consider requesting
- 1 pool platelets
- 2 pooled units of cryoprecipitate

**The Laboratory will continue to issue 6 blood & 4 FFP at a time whilst the patient is bleeding**

Ensure the Porter is sent to collect blood and blood components

**The clinical area will**
- Nominate a Blood Coordinator to ensure blood & blood components are managed effectively
- Send full blood count & coagulation screen samples as a baseline and hourly thereafter
- Send repeat group & save sample if requested
- Ensure ISS informed of need for emergency Porter (if Porter not arrived following 2222 call)
- Ensure the patient’s Consultant has been informed (if not already aware)
- Discuss on-going management with the Haematology SpR (contact through switchboard if contact details not known)
- Inform the Blood Transfusion Laboratory of the patient outcome, destination if moved and when to stand down

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I) Guideline Summary

Pathway of care for APH

Call for help and initiate resuscitation

Airway
Breathing: 100% oxygen and mask / bag

Circulation: left lateral position and 2 IV lines (14G)

Take blood for FBC, clotting and crossmatch 6 units

If shocked: Blood should be given ASAP it it is available to minimise dilutional coagulopathy; conversely if it not available keep giving fluid to maintain perfusion of vital organs.

Once available give warmed blood as much and as rapidly as needed. Ideally crossmatched (takes 45mins) Blood type specific (takes 10-15 min) O-ve (Immediate)

Listen for fetal heart sounds

Intensive monitoring throughout and keep the patient warm
Urinary catheter (hourly measurements) Pulse, BP, RR, temp and oxygen saturation
Consider a CVP line (hazardous if DIC) Monitor for clotting disorders (and treat) Monitor for hypoglycaemia (and treat)

If alive consider immediate delivery

If no heart sounds confirm fetal death with ultrasound and exclude placenta praevia

Watch for PPH

Placenta praevia

Ruptured uterus

Caesarean section may require GA

No Placenta praevia

Induce labour

If bleeding continues

If clotting disorder present give warmed fresh blood, FFP, cryoprecipitate Platelets are rarely needed Consult haematologist re other products

It is the APH that weakens and then the PPH that kills. Attention should constantly focus on resuscitation to maintain the circulation.
Severe sepsis

- Sepsis is often sinister and pregnant women with sepsis can deteriorate and die rapidly after the onset of symptoms. It is vital that prompt recognition, stabilisation and treatment of the underlying cause are initiated to avoid the rapid escalation of deterioration that leads to cell death and, ultimately patient death.
- Within obstetrics maternal death from sepsis has risen rather than declined. It is the leading direct cause of maternal death this triennium 2006-2008 (CEMD2011). The diagnosis of sepsis is not always straightforward and due to the altered physiology that takes place in pregnancy early signs may be obscured.

Clinical signs indicative of sepsis consist of one or more of the following
- Pyrexia, hypothermia or swinging pyrexia
- Tachycardia
- Tachypnoea
- Hypotension
- Low saturation and hypoxia
- Oliguria
- Impaired conscious level
- Failure to respond to implemented treatment

**Clinical symptoms associated with sepsis (can be non-specific)**
- Diarrhoea or vomiting
- Cough
- Rash
- Abdominal pain
- Rigor
- Offensive discharge
- Urinary symptoms

**Management of sepsis**
All women suspected or identified with sepsis should be managed initially within the obstetric high dependency unit
- Blood cultures should be obtained before administration of antibiotics however it should not prevent timely administration of antimicrobial therapy
- Broad spectrum antibiotics should be administered within one hour of suspicion or identification of sepsis
- Measure serum lactate also send blood for CRP, FBC, LFT’s U&E’s and consider ABG’s
- Administer prescribed intravenous fluids
- In the presence of hypotension and/or a serum lactate >4mmol/l crystalloids or equivalent should be administered at 20ml/kg
- If hypotension has not responded to fluid resuscitation consider vasopressors to maintain a mean arterial pressure of (MAP) >65mmHg
- If hypotension is persistent despite fluid resuscitation and/or serum lactate is >4mmol/l consider central venous pressure monitoring to achieve CVP of ≥8mmHg
- Aim to achieve a central venous oxygen saturation (ScvO2) ≥70% or mixed venous oxygen saturation (ScvO2) ≥65%

**Further management**
- Administer O2 therapy if saturation <93% give 15lts via reservoir mask
- Culture areas that maybe focus of infection i.e. urine, LVS, HVS, wound, throat, sputum, MRSA screen
- Discuss all cases with microbiologist – this must be done swiftly in cases of penicillin allergy
- Insert urinary catheter and monitor hourly aim for ≥0.5ml/kg/hr
- Consider 12 lead ECG
- Consider any relevant imaging to confirm source of infection

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• If a group A streptococcal infection is suspected or confirmed, the woman must be placed in a side room and contact precautions should be applied for up to 48hrs following effective antibiotic therapy. The infection control team must be informed.
• Consider insertion of arterial line for accurate haemodynamic monitoring and blood sampling
• Red packed cells may be considered when haemoglobin falls to <7.0g/dl aim for Hb of 7.0-9.0g/dl

**THANKYOU FOR TAKING TIME TO READ THIS INDUCTION INFORMATION. WE HOPE YOU WILL ENJOY YOUR TIME WORKING ON LABOUR WARD AT ST MARY’S**