LOCAL OPERATING PROCEDURE

Approved by Quality & Patient Care Committee
21 June 2018

SURGICAL BUNDLE FOR ABDOMINAL SURGERY

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Utilise a surgical bundle to reduce Surgical Site Infections (SSI) for all abdominal surgery, except caesarean section within 30 minutes

2. PATIENT

- Woman who is having abdominal surgery

3. STAFF

- Medical, nursing and midwifery staff

4. EQUIPMENT

- Clippers
- Occlusive dressing

5. CLINICAL PRACTICE

Hand Hygiene

- Adhere to the five moments of hand hygiene

Skin flora

- Advise woman to shower with chlorhexidine body wash two hours prior to surgery. Leave chlorhexidine body wash on the abdomen for one minute before washing off
- Apply first aqueous chlorhexidine 2% wipe to woman's abdomen on the ward/unit just prior to going to theatre. Do not wash off
- Apply second aqueous chlorhexidine 2% wipe to woman's abdomen in the anaesthetic bay

Hair removal

- Use clippers for hair removal if required. Clip in ward/unit prior to transfer to theatre, as close to time of surgery as possible

Antibiotic prophylaxis

- Give single dose of cephazolin (if no allergy) intravenously (IV) 30 - 60 minutes prior to surgical incision, in the following doses:
    - ≤ 50 kg 1 g
    - 51-120kg 2g
    - > 120kg 3g

OR

- Give clindamycin 600mg IV in case of known penicillin allergy
- Repeat prophylactic antibiotic if significant blood loss (> 2 litres)
- Repeat prophylactic antibiotic if the operation exceeds 3 hours

Skin preparation/Intraoperative management

- Use alcohol chlorhexidine antiseptic for skin cleaning and allow to dry prior to commencement of surgery
- Clean the vagina with povidone-iodine, for woman having a caesarean in labour or with pre-labour ruptured membranes
- Avoid manual removal of the placenta if possible

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Dressing

- Use moist wound healing e.g. an occlusive dressing (OpSite® or Tegaderm® or Comfeel® Plus Transparent)
- Consider using OpSite Visible® for woman with a pendulous abdomen.

Postoperatively

- Leave surgical dressing untouched for five days, unless compromised
  Consult the wound care specialists (Clinical Nurse Consultant [CNC]: 0417 944 297/or page 44068 or Clinical Nurse Specialist [CNS]: extension 26240) if there are concerns over the wound including:
    - increasing erythema
    - increase bleeding/drainage or discharge
    - small dehiscence or fistula
    - poor healing

Discharge from hospital

- Ensure that a woman who has had a caesarean birth receives adequate advice about post-operative wound care as outlined in the patient information leaflet "Discharge Information Following Caesarean Section" (Appendix 1)

6. DOCUMENTATION

- Medical record
- Pre-op checklist
- eMeds

7. EDUCATIONAL NOTES

Bundle

- Care bundles are groupings of best practice interventions with respect to a disease process, which individually improve care, but when applied together result in a substantially greater improvement in patient care.

Skin flora

- Most SSI are caused by the patient's own flora. Bacteria double every 20 minutes. A shower within two hours of surgery reduces the amount of bacteria on the skin.
- Chlorhexidine binds to the stratum corneum. This means it kills bacteria for many hours after it has been applied. It is cumulative and applications at different stages of the bundle will attain better antimicrobial effect
- Povidone–iodine releases free iodine during the drying process to kill bacteria.

Hair removal

- Do not remove hair at the surgical site unless the presence of hair will interfere with the operation.
- Do not use razors. If hair removal is necessary, remove outside the operation rooms using clippers

Antibiotic prophylaxis

- Perioperative prophylactic antibiotics need to be concentrated in the tissue (not just in the blood) to be effective to kill pathogens that enter the abdomen during surgery

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Skin preparation/Intraoperative management

- Alcohol is highly bactericidal and effective for preoperative skin antisepsis but does not have persistent activity when used alone. Rapid, persistent, and cumulative antisepsis can be achieved by combining alcohol with chlorhexidine gluconate or an iodophor e.g. povidone-iodine.
- Chlorhexidine and iodophor should not be interchanged. If chlorhexidine showers and wipes are used, alcohol and chlorhexidine should be used in Operating Theatre
- Provided a dual agent skin preparation containing alcohol is completely dried before placing a drape on the patient then there is no fire risk. Once the agent is dried it is no longer flammable. Therefore, in a controlled environment there is no fire risk. In an emergency caesarean within 30 minutes (CAT 1) the lead surgeon is to make the decision whether the dual agent skin preparation should be used.
- Dual agent skin preparation is contraindicated if there is a known allergy to any of the components of the agent.
- Most recent Society for Healthcare Epidemiology of America (SHEA) (2014 guidelines state that dual antiseptic should be used, stated as level 1 evidence
- Spontaneous placental removal/controlled cord traction at the time of caesarean section is associated with a lower risk of endometritis

Dressing

- Advantages of moist wound healing include the following:
    - heals 2-3 times faster than dry wounds
    - environment facilitates all three phases of wound healing - specifically, it decreases the intensity and length of the inflammatory phase, and speeds the proliferative phase.
- OpSite Visible® dressing allows more moisture to be removed from around the wound, and therefore may be advantageous in a woman with a pendulous abdomen

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Antimicrobial Guideline Obstetrics
- Obesity and weight gain in pregnancy labour and postpartum
- SESLHNPD/133 Wound – assessment and management
- MoH Hand Hygiene Policy 2010 _58
- Caesarean Birth – Maternal Preparation and Receiving the Neonate(s)

9. RISK RATING

- Medium

10. NATIONAL STANDARD

- IP – HAI Prevention

11. REFERENCES

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3. CDC Guidelines for the Prevention of Surgical Site Infections. 2017
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REVISION & APPROVAL HISTORY
Reviewed and endorsed Maternity Services LOPs 19/6/18
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APPENDIX 1

Discharge Information Following Caesarean Section

Breastfeeding after a caesarean section
The World Health Organisation recommends all babies are exclusively fed breastmilk up to 6 months of age, followed by the introduction of appropriate complementary foods, with breastfeeding continuing well into the second year, or as long as you both wish. After your caesarean, you will need to find a breastfeeding position that is comfortable for you and your baby whilst you are recovering from your operation. Community supports are available to assist you while you are establishing breastfeeding. Information is available in your Blue book. Please contact your hospital midwife or GP should you develop painful redness of the breast associated with fever, chills and feeling unwell.

Passing urine
If you have any problems passing urine within 2 weeks of your caesarean, e.g. not able to pass urine, passing urine too often or leaking/incontinence, please contact the Bladder Clinical Nurse Consultant Monday to Thursday, 0800-1630 hours, on 0409 903 676. If these problems occur after hours or more than 2 weeks since your caesarean, contact your GP or local emergency department.

Blood loss after the operation
After a caesarean birth it is normal to have vaginal bleeding. This bleeding/loss lasts for the first few weeks, but, may continue for up to 6 weeks. It comes from the placental site healing. If you experience any increased bleeding, unpleasant smell, or are concerned, please contact the hospital/your midwife if this occurs within 2 weeks of your caesarean. If it is more than 2 weeks since your caesarean, please contact your GP or local emergency department.

Pain relief
You should continue to take regular paracetamol for pain relief if you require it. You may take 2 paracetamol tablets every 6 hours. Do not take more than 8 paracetamol tablets in a 24-hour period. Before discharge your hospital doctor/midwife will assess if you need stronger pain relief to take home. If you need to take more than 8 paracetamol tablets per day once home, please speak to your GP. Please be aware strong pain medications may cause constipation and drowsiness.

Wound care
- It is important your wound remains clean and dry.
- Leave the film dressing on until the stitches or staples are removed (usually 5-7 days). Some stitches dissolve and do not need to be removed.
- Shower as normal, pat dry your wound with a clean towel. It is important that your wound is completely dry before you dress.
- Check your wound in the mirror daily to make sure there are no signs of infection, such as increasing redness, pain or a smelly discharge
- If you are concerned about your wound, are feeling unwell or have a high temperature, please contact the hospital/your midwife, if it is within 2 weeks of your caesarean. If it is more than 2 weeks since your caesarean, please contact your GP or local emergency department.

How much time does it take to recover from a caesarean section?
The recovery time after a caesarean section varies for each woman. Most women will leave hospital after 3-5 days. Once you go home:
- You will need plenty of rest – be sure to rest when your baby rests.
- You may need regular pain relief medication.
- Remember you have had major surgery. If it hurts, then slow your movement. Slowly increase your activity, starting with walking.
- Eat a high fibre diet as this will help prevent constipation. You may require laxatives to soften and pass stools regularly in the first few days or weeks.

Driving after a caesarean section
It may take 2-6 weeks before you are comfortable enough to drive after your caesarean. Ask your doctor/midwife at the hospital or your GP about when you can drive safely. Before attempting to drive ensure that you can sit comfortably in the car, work the controls and wear your seatbelt securely. Make sure you can look over your shoulder and perform an emergency stop. Ensure that you are not tired or under the influence of the effects of strong medications when considering recommencing driving. Most insurance companies will insure you after an operation if you follow the instructions of your doctor/GP. Check with your insurance company if you are unsure of your insurance company's policy.

Does this mean I will need to have a caesarean section for future pregnancies?
Most women are able to consider a vaginal birth after one uncomplicated caesarean section. Vaginal birth after caesarean (VBAC) is supported at RHW for women who have no contra-indications. It is recommended to have at least 18 months between births. Your hospital doctor/midwife will let you know if it is ok for you to consider a VBAC in a future pregnancy, and you will be given a post-caesarean letter to take home.

If you have any further concerns with your breasts, bladder, pain relief, wound, or bleeding, once you have been discharged from hospital/home midwifery care, please contact the hospital/your midwife, if it is less than 2 weeks since your caesarean. If it is more than 2 weeks since your caesarean, please contact your GP or local emergency department.