Obstetric abdominal wound care guideline (GL778)

Approval

<table>
<thead>
<tr>
<th>Approval Group</th>
<th>Job Title, Chair of Committee</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity &amp; Childrens Services Clinical Governance Committee</td>
<td>Chair, Maternity Clinical Governance Committee</td>
<td>2nd October 2015</td>
</tr>
</tbody>
</table>

Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author, job title</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Jan 2009</td>
<td>M Whitfield (Dep Ward Mngr Iffley)</td>
<td>Trust requirement</td>
</tr>
<tr>
<td>2.0</td>
<td>April 2010</td>
<td>M Whitfield, Shui-Ling Briggs (Tissue viability nurse), B Reid (Consult Obstetrician)</td>
<td>Reviewed</td>
</tr>
<tr>
<td>3.0</td>
<td>Feb 2013</td>
<td>M Whitfield, J Bavin (Dept Lead Mat Theatres), B Reid (Consult Obstet)</td>
<td>Reviewed</td>
</tr>
<tr>
<td>3.1</td>
<td>Aug 2014</td>
<td>T Haxton (DAU Snr Midwife), B Reid (CD Maternity &amp; Children’s Services), J Bavin (Dept Lead Mat Theatres)</td>
<td>Change from use of iodine to Octenalin and other changes to pg 3</td>
</tr>
<tr>
<td>4.0</td>
<td>August 2015</td>
<td>J Bavin (Dept Lead Mat Theatres), T Haxton (AN specialist MW), J Siddall (Consultant Obstetrician)</td>
<td>Reviewed</td>
</tr>
</tbody>
</table>

To be read in conjunction with

- Antibiotic guideline for Obstetrics 2012-13 (GL787)
- MRSA pathway for Maternity (April 2014)
Overview: A wound can be defined as an injury to the body that involves a break in the continuity of tissues or of the body structures (Martin 2002).

This guideline focuses on pre-operative preparation and post-operative wound care for obstetric abdominal surgery

Guidance for Patient Preparation before admission

- At pre-op assessment ensure screening results for at risk groups for MRSA are available. If the patient is colonised, decolonisation therapy is required in accordance with current Trust guidance. For Maternity patients their decolonisation therapy treatment is given at 34 weeks - See MRSA Pathway for Maternity.
- Advise women having elective surgery to shower or have a bath using soap, on the day of surgery.
- Give women specific theatre wear on day of admission appropriate for the procedure and clinical setting, with easy access to the operative site and for placement of devices. Consider also the patient’s comfort and dignity.

Guidance for Pre-operative Care

- Routine hair removal is not recommended to reduce the risk of surgical site infection. If hair removal is required, electric clippers with a single-use head on the day of surgery should be used. Razors should not be used for hair removal, because they increase the risk of surgical site infection.
- Use the local antibiotic formulary for routine prophylaxis and always consider potential adverse effects when choosing specific antibiotics for prophylaxis. Refer to Antibiotic guideline for Obstetrics 2012-13 (GL787)

Guidance for the Intraoperative Phase

Operating team preparation
The operating team should:

- wear sterile gowns and gloves in the operating theatre during the operation
- wash their hands prior to each procedure using an antiseptic surgical solution and use a single-use brush or pick to clean the nails, so that hands and nails are visibly clean, prior to the first operation on the list and between each operation
Patient preparation:

VAGINA:

- The operator’s hands must be thoroughly cleaned, as for surgery, and sterile gloves worn.
- The patient will be placed in the appropriate position; feet together, knees flexed and hips abducted.
- Octenalin will be used to cleanse the vulva, introitus and vagina before abdominal skin preparation for surgery.
- A sterile trolley will be prepared: equipped with a sterile towel, gallipot, 5 small Raytec swabs, Rampley’s sponge-holders and, if required, an indwelling catheter, catheter bag, Instillagel and sterile water for catheter balloon inflation.
- Cleanse vulva with swab soaked in Octenalin solution, part labiae and cleanse introitus (front to back) with a further clean soaked swab then (without allowing the labiae to meet again) thoroughly cleanse the vagina with a swab held in the Rampley’s forceps and soaked in Octenalin solution.
- If catheterisation is needed - Leave the instrument & swab in the vagina, do not allow the labia to close and insert the catheter in the usual manner.
- Repeat the vaginal cleansing as before with a fresh soaked swab.

SKIN:

Use a Chloroprep “wand” to prepare the abdominal skin at the surgical site before making an incision. This contains 26mls of Chlorhexidine gluconate 2% in isopropyl alcohol 70%: “Snap” the wing/lever to release the ampoule of cleansing solution into the applicator sponge,. Documented training should be undertaken for correct use of Chloroprep wand as incorrect use renders product ineffective. (There is a DVD available in theatres to observe the correct process: please ask the Theatre Manager)

The solution must be allowed to dry fully before draping. Do not wipe dry.
Wound dressings

- Protect the fresh wound line with a large dry swab and clean the area around the wound with a swab moistened in antiseptic solution. Do not rub the incision
- Protect the wound when removing drapes
- Cover the surgical incision with an appropriate interactive dressing at the end of the operation (NICE guideline 74 October 2008).
- The dressing of choice is a mepilex post op dressing. The skin around the operation site must be dry prior to applying dressing. This should remain undisturbed for 5 days unless there is significant exudate under the dressing. The dressing should be left on the wound until Day 5 / 6
- Women whose BMI is >35kg/m² at booking may be invited to have an alternative dressing which has been evaluated during 2015. There are specific instructions in the packs with these dressings, which must be read and followed.
- Should dressings become soiled or loose and require changing then;
  - Use an aseptic non-touch technique for changing or removing dressings.
  - Use sterile saline for wound cleansing up to 48 hours after surgery.
  - Advise patients that they may shower safely 24 hours after surgery but to avoid getting the dressing soaked.
  - Use an interactive dressing for surgical wounds that are healing by secondary intention
- Refer to a Tissue Viability Link Nurse/Midwife for guidance on wound management. If further expert management and advice is required, refer to the Trust Nurse Consultant for Tissue Viability (or another healthcare professional in the Trust with responsibilities for providing guidance on clinical practices relating to wound management) for advice on appropriate dressings for surgical wounds that are healing by secondary intention.
- If wound healing is compromised observe for signs of infection (redness, temperature, inflammation, increased pain, increased discharge, patient feeling generally unwell) perform 4 hourly observations and request medical review.
- If wound is oozing or showing signs of infection take a swab for MC&s, then cleanse with normal saline using aseptic technique apply meplix dressing. Also consider packing the wound if required –refer to the wound care pathway.

Do not use the following to reduce the risk of surgical site infections:

- Topical antimicrobial agents for surgical wounds that are healing by primary intention
- Eusol and gauze, or moist cotton gauze or mercuric antiseptic solutions for surgical wounds that are healing by secondary intention.
Antiseptic lotions use on wounds to be healed by secondary intention should be avoided because of their cytotoxic effects on newly formed granulation tissues

**Antibiotic treatment**
- If a surgical site infection is suspected (i.e. cellulitis), commence antibiotic treatment in accordance with the Trust protocol.
- Choose an antibiotic that covers the most likely causative organisms. Consider local resistance patterns and the results of microbiological tests.

**Specialist wound care services**
To improve the management of surgical wounds:
- Use a structured approach to care (including preoperative assessment to identify patients with potential wound healing problems).
- Provide enhanced education to healthcare professionals, patients and carers, and share clinical expertise.

**Debridement**
- Do not use Eusol and gauze, or dextranomer or enzymatic treatments for debridement of surgical site infections.

**References**

2. Nice Clinical Guideline 74, Surgical Site Infection, October 2008 [www.nice.org.uk/guidance/CG74](http://www.nice.org.uk/guidance/CG74)

**Author:** Melanie Whitfield (Senior Midwife, Deputy Ward Manager - Iffley) Jan 2009,

**Reviewed:** April 2010 - Shui-ling Briggs (Nurse Consultant Tissue Viability), February 2013 - M Whitfield, B Reid (CD for Maternity & Children’s Services), J Bavin (Dept Lead for Maternity Theatres), Sept 2015 (J Bavin, T Haxon, J Siddall)

**Review:** October 2017
Appendix A

Physiology

Wounds can be divided into 6 categories:

1. contusion (bruise)
2. abrasion (graze)
3. laceration (tear)
4. incision (cut)
5. puncture (stab)
6. burn

Both external and internal factors can contribute to the formation of a wound. These may include:

- **External**: mechanical (friction, shear, surgery); chemical, electrical, temperature extremes (burns); radiation; micro-organisms.
- **Internal**: circulatory system failure (venous, arterial, lymphatic); endocrine (diabetes); neuropathy; haematological (porphyria cutanea tarda, mycosis fungoides); malignancy (fungating wound, Marjolin's ulcer) (Naylor et al. 2001). (The Royal Marsden Manual of Clinical Nursing Procedures)

Wound healing

Wound healing is the process by which tissues damaged or destroyed by injury or disease are restored to normal function. Healing may occur by first, second or third intention. Healing by first intention involves the union of the edges of a wound under aseptic conditions without visible granulation, for example, a laceration or an incision that is closed with sutures, clips or skin adhesive (Miller & Dyson 1996; Dealey 2005).

Healing by **secondary intention** occurs when the wound's edges cannot be brought together. In this case the wound is left open and must fill with new tissue (granulate) until the level of intact epidermis is reached. When this is achieved epithelial cells will begin to migrate over the wound surface to restore integrity of the skin (Flanagan 1998). Wounds that heal by secondary intention include surgical or traumatic wounds where a large amount of tissue has been lost, heavily infected wounds, chronic wounds (leg or pressure ulcers) or, in some cases, where a better cosmetic or functional result will be achieved (Miller & Dyson 1996; Calvin 1998).

Healing by **tertiary intention** (sometimes referred to as delayed primary intention) may be employed when there is considerable infection or contamination of the wound. The wound is left open until it is clean or free of infection and then the edges are brought together, as with primary intention healing (Sussman 1998).