VON VOIGTLANDER WOMEN'S HOSPITAL
MICHIGAN MEDICINE

Perinatal Joint Practice

Third and Fourth Degree Laceration Repair

VVWH-17-216

Original Approval: 2017 October 23	**Type**: Clinical Guideline
Revision/Review Re-approval: new	**Key words**:
Next Review Due: 2020 October	Delivery; Fourth Degree; OASIS; Pregnancy; Postpartum; Laceration; Repair ; Sphincter; Third Degree
Supersedes: n/a	
Posted Date: 2017 December 11	**Retire Date:** current

I. **Applicability and Purpose-** This guideline makes recommendations for management of the repair of 3rd and 4th degree obstetric lacerations. These recommendations are based on Guideline No. 29, from the Royal College of Obstetricians and Gynaecologists. Much in this guideline is based on expert opinion. Individual clinical situations and provider experience may dictate a practice different than the recommendations herein.

II. **Definitions**

A. Third degree lacerations (sphincter muscle injury) are classified further into:
   a. 3a-External anal sphincter is partially interrupted
   b. 3b-External anal sphincter is completely interrupted
   c. 3c-Internal anal sphincter is interrupted

B. Fourth degree lacerations involve rectal mucosa

C. OASIS stands for Obstetric Anal Sphincter Injuries

III. **Repair Procedure**

A. Optimization of the surgical environment may improve repair outcomes. Moving to the O.R. may optimize exposure, analgesia, and assistance.

B. Obstetricians trained in management of OASIS should perform the repairs.

C. Urogynecology is available for consultation by Paging #37794.

D. A single dose of a broad spectrum antibiotic should be given at the time of the repair. [2]
   - Cefazolin 2g IVPB x 1 AND Metronidazole 500mg IVPB or PO x 1
   - For severe PCN allergy: Clindamycin 900mg IVPB x 1 AND Gentamicin 5mg/kg IVPB x 1

E. Rectal mucosa should be closed using 3-0 or 4-0 Vicryl, either running or interrupted technique

F. If the internal anal sphincter can be identified, it should be repaired separately using a 3-0 or 2-0 PDS using interrupted or mattress sutures and should NOT be repaired with overlapping technique

G. The external anal sphincter should be repaired using 3-0 or 2-0 PDS using an end-to-end technique

These are general guidelines not based on specific medical diagnosis. Any medical case depends on specific medical diagnosis. The guidelines do not constitute medical advice and should not be used for specific cases. Our goal is to provide general information that may assist in the care of patients. General guidelines can never replace the expertise and clinical judgment of the treating physician. Each patient's situation must be evaluated individually.

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H. Burying the knots below the perineal muscles is recommended to minimize knot and suture migration to the skin

I. Figure of 8 sutures should be avoided as they cause ischemia

J. Rectal examination should always be performed after the repair

IV. Postoperative Management

A. Postoperative laxatives should be used for at least 2 weeks, titrated to achieve stool the consistency of toothpaste. Laxative choices include:

- Polyethylene glycol (Miralax) 17g, 1 to 3 times daily
- Mineral Oil 30mL PO, 1-2 times daily
- Docusate sodium (Colace) 100mg 1 to 3 times daily

B. Patients can be referred to Michigan Healthy Healing After Delivery clinic and will be seen within 2-4 weeks

C. Women should be offered referral to postpartum pelvic floor physical therapy

V. Other Recommendations

A. Rectal exam is recommended after any vaginal or perineal repair. Performing a rectal exam after all vaginal deliveries may help detect unrecognized sphincter or rectal injuries.

B. Where episiotomy is indicated, the mediolateral technique is recommended, with careful attention to ensure that the angle is 60 degrees away from the midline when the perineum is distended.

VI. References

[1] The Management of Third and Fourth Degree Perineal Tears. Green-top Guideline No. 29, June 2015. The Royal College of Obstetricians & Gynaecologists

[2] Prevention and Management of Obstetric Lacerations at Vaginal Delivery. ACOG Practice Bulletin Number 165, July 2016. American College of Obstetricians and Gynecologists

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VIII. Approval

Perinatal Joint Practice Committee October 23, 2017

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