5 INTRAPARTUM CARE

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5.16 MANAGEMENT OF THIRD AND FOURTH DEGREE PERINEAL TRAUMA

AIM

To provide guidance on the diagnosis, management and treatment of obstetric anal sphincter injury.

KEY POINTS

1. Obstetric anal sphincter injury encompasses both third and fourth degree perineal tears.

2. A third degree perineal tear is defined as a partial or complete disruption of the anal sphincter muscles, which may involve either or both the external (EAS) and internal (IAS) muscles. The types of third degree tears are:

    - 3a: Less than 50% of EAS thickness torn.
    - 3b: More than 50% EAS thickness torn.
    - 3c: Both EAS and IAS torn.

3. A fourth degree tear is defined as a disruption of the anal sphincter muscles with a breach of the rectal mucosa. If the tear involves only the rectal mucosa with an intact anal sphincter complex (Buttonhole tear), this shall be documented as a separate entity. If not recognised and repaired, this type of tear may cause rectovaginal fistulae.

4. Clinicians need to be aware of the risk factors for obstetric anal sphincter injury, but also recognise that known risk factors do not readily allow its prediction or prevention. Taking an overall risk of 1% of vaginal births, the following factors are associated with an increased risk of a third degree tear

    - Birth weigh > 4kg
    - Persistent occipitoposterior position
    - Nulliparity
    - Induction of labour
    - Second stage longer than 1 hour.
    - Shoulder dystocia
    - Midline episiotomy
    - Forceps birth.

5. When an episiotomy is indicated, the mediolateral technique is recommended, with careful attention to the angle cut away from the midline. A lower risk of third degree tear is associated with a larger angle of episiotomy.[1] (i.e. at the 8 o'clock position)

6. All women having a vaginal birth with evidence of genital trauma shall be examined systematically to assess the severity of damage prior to suturing.

7. All women having an operative vaginal birth or who have experienced perineal injury shall be examined by an experienced practitioner trained in the recognition and management of perineal tears.

8. Repair of third and fourth degree tears needs to be carried out in an environment that provides adequate lighting and visualisation of the perineum.

9. Transfer to the operating theatre for perineal repair under regional or general anesthetic is at the discretion of the accredited obstetric registrar (or above).

10. The use of broad spectrum antibiotics is recommended following repair to reduce the incidence of postoperative infections and wound dehiscence.[2]

11. Suture as soon as possible after birth- it is less painful and reduces the risk of infection. Following a water birth, it is advisable to delay suturing for 1 hour following the birth.

12. It is no longer necessary for women to remain in hospital until their bowels have opened.

SUTURE MATERIAL

- Rapidly absorbed suture material is not appropriate for 3rd and 4th degree tears. Use 2/0 or 3/0 Polysorb.

METHOD OF CHOICE FOR THE REPAIR

- A continuous non locking suturing technique used to appose each layer (vaginal tissue, perineal muscle and skin) is associated with less short term pain compared with the traditional interrupted method.[4,5,6]

- Using a subcuticular method to the skin avoids the collections of nerve endings found in the superficial skin layer; in addition, the reactionary oedema is transferred through the whole length of the suture rather than interrupted sutures which are transverse across the wound.[3]

POST REPAIR MANAGEMENT

1. Intermittent ice therapy to decrease swelling for the initial 24 hours.

2. Adequate analgesia. Avoid codeine containing analgesics.

3. Regular rectal analgesia should be avoided.

4. Laxatives or stool softeners are advised for 7-10 days to reduce the incidence of postoperative wound dehiscence.[2]

5. Ask the woman whether she has any concerns about the healing process of the perineal wound; including perineal pain, discomfort, stinging, or offensive odour.

6. Offer to assess the woman's perineum if she has pain or discomfort

7. Encourage the woman to shower daily.

8. Advise the woman to:

- Wash and dry her perineum after each void and bowel action.
- Change her sanitary pads 2-3 hourly.
- Avoid salt baths, powders or steroid creams.

9. All women with third and fourth degree tears shall be referred for physiotherapy follow up.

10. Provide information on pelvic floor muscle exercises.

11. Advise the woman of
    - The outcomes of anal sphincter injury.
    - Any signs of ongoing symptoms or consequences
    - Resuming sexual intercourse
    - Future management.
    - The effect of the injury on subsequent pregnancy management.

12. Prior to discharge, all women who have sustained a third degree tear shall be advised to see her GP at 6 weeks and again at 3 months. Give these women a patient information card (KE314).

13. Prior to discharge all women who have sustained a fourth degree tear should have a gynaecological clinic appointment made for 6-12 weeks postpartum, unless an earlier follow up is indicated.

14. If a woman is experiencing incontinence or pain at follow up, referral to a specialist gynaecologist or colorectal surgeon for endoanal ultrasonography and anorectal manometry should be considered.

REFERENCES

1. Eogan M, Daly L, O'Connell PR, O'Herlihy C. 2006. Does the angle of episiotomy affect the incidence of anal sphincter injury? **BJOG.**113:190-4.

2. Royal College of Obstetricians and Gynaecologists. 2007. Green top Guideline No.29.**The management of third and fourth degree perineal tears**. London (UK): RCOG Press.

3. Royal College of Obstetricians and Gynaecologists.2004. Green top guideline No 23**.Methods and materials used in perineal repair**. London(UK):RCOG Press.

4. Kettle C, Hills RK, Jones P, Darby L, Gray R, Johanson R.2002. Continuous versus interrupted sutures for perineal repair with standard or rapidly absorbed sutures after spontaneous vaginal birth: a randomised controlled trial. **Lancet.** 359(9325):2217-23.

5. Kettle C.2005. The management of perineal trauma.In Henderson C,Bick D,editors. **Perineal care: an international issue**. Quay Books. MA Healthcare Ltd.

6. Kettle C, Hills RK, Ismail KMK.2007.Continous versus interrupted sutures for repair of episiotomy or second degree tears. **The Cochrane database of Systematic Reviews**. Issue 4.