Obstetric Anal Sphincter Injury NHS (OASI)



Target audience	All mi	idwifery	and	medical	staff	providing	maternity	care	in	NHS
	Lanark	shire.								
Patient group	All women following vaginal birth.									

Summary

85% of women will sustain some degree of perineal trauma with vaginal birth. The rate of OASI in NHSL is 3% (2023).

Definition:

First degree - injury to perineal skin and/or vaginal mucosa.

Second degree - injury to perineum involving perineal muscles but not involving the anal sphincter.

Third degree - injury to perineum involving the anal sphincter complex:

- 3a tear: less than 50% of external anal sphincter (EAS) thickness torn.
- 3b tear: more than 50% of EAS thickness torn.
- 3c tear: both EAS and internal anal sphincter (IAS) torn.

Fourth degree - injury to perineum involving the anal sphincter complex (EAS and IAS) and anorectal mucosa.

NB. a buttonhole tear is a separate entity where the tear involves only anal mucosa with an intact anal sphincter complex. If not recognised and repaired, this type of tear may cause an ano-vaginal fistulae. When in doubt, classify to higher degree.



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Incidence

All women having had a vaginal birth are at risk of sustaining OASI or isolated buttonhole tears. Therefore, all women following vaginal birth should be examined systemically including a digital examination to assess any damage.

The following factors are associated with an increased risk of OASI:

- Birthweight ≥ 4 kg (up to 2%)
- Persistent occipito-posterior position (up to 3%)
- Nullparity (up to 4%)
- Induction of labour (up to 2%)
- Epidural analgesia (up to 2%)
- Second stage longer than 1 hour (up to 4%)
- Shoulder dystocia (up to 4%)
- Midline episiotomy (up to 3%)
- Forceps delivery (up to 7%)

Prevention

- Consider right mediolateral episiotomy for instrumental deliveries.
- Perineal protection at crowning can be protective.
- Warm compression during the 2nd stage of labour reduces the risk of OASI.

Repair

Repair of OASI should:

- Usually ake place in an operating theatre.
- Usually take place under regional or general anaesthesia.
- Be performed with good lighting.
- Be performed with the correct surgical instruments.
- Be performed by a clinician confirmed as competent or under direct supervision by a competent clinician.

Repair of OASI in the delivery room may be performed in certain circumstances after discussion with the consultant obstetrician. This may be necessary due to labour ward or theatre activity. It is important that there is adequate lighting, equipment and anaesthesia present in the room with staff to support the operator.

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Surgical technique

- Anorectal mucosa continuous or interrupted sutures, 3-0 vicryl
- IAS interrupted or mattress sutures, not overlapping. 3-0 PDS or equivalent.
- EAS:
 - o 3-0 PDS or equivalent
 - o full thickness tear overlapping or end-to-end sutures.
 - o partial thickness tear end-to-end sutures.
- Bury the surgical knots under the superficial perineal muscles.
- Use 2-0 vicryl rapide for the remainder of the tear as per normal practice.

Documentation

Document the following:

- findings of per retum (PR) examination pre- and post-procedure
- type of tear and location
- sutures used and if overlapping or end-to-end
- complete relevant perineal repair section on BadgerNet
- equipment check, needle and swab count

Postoperative management

- Broad-spectrum antibiotics are recommended to reduce risk of wound dehiscence and infection:
 - o co-amoxiclav 1.2g IV single dose
 - o followed by co-amoxiclav 375mg TDS orally for 7 days
- If penicillin allergy:
 - o clindamycin 600mg IV single dose
 - o followed by clindamycin 150mg QDS orally for 7 days
- Insert in-dwelling catheter (IDC) can be removed after 24 hours or once mobile unless any other indication.
- Laxatives:
 - o 2-week course
 - 10ml BD lactulose or Fybogel 1 sachet BD
- **Physiotherapy:**
 - Monday to Friday advise ward-based physiotherapy staff on extention 5830

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- Out-of-hours refer to physiotherapy via BadgerNet referral to advise that patient has sustained OASI
- All patients are offered an "opt-in" to physiotherapy at 6 weeks postnatal for assessment of the Pelvic Health Physiotherapy Clinic.

Debrief:

- o all women should have a debrief prior to discharge
- o postnatal review appointments should be made with the relevant consultant for all women with a 4th degree tear or if clinical situation results in recommendation for postnatal review.

• Communication with primary care:

- discharge letter should include detail about type of OASI, medication on discharge and follow-up if required.
- if experiencing pain or incontinence at 6-12 week postnatal check, suggest referral to specialist gynaecologist or colorectal surgeon should be considered.

Prognosis

- 60-80% of women are asymptomatic at 12 months postnatal.
- Women should be counselled regarding options for future deliveries.
- Recurrence rate is 6-8% therefore aim for vaginal deliveries especially if asymptomatic after counselling and agreement by patient.
- If the woman remains symptomatic, she should be counselled regarding the option for elective caesarean birth at 39 weeks of gestation.

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Clinical governance

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