The Perineum & Vaginal Birth

- How common is perineal trauma?
- What are its consequences?
- Can we prevent perineal trauma?
- Role of episiotomy
- Repair techniques
- Medico legal issues

Complications

- Bleeding.
- Wound Breakdown.
- Infection.
- Dyspareunia.
- Prolapse.

Vaginal Birth by Perineal Status

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<th>Type of Delivery</th>
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<th>2nd</th>
<th>3rd</th>
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Type of Delivery in NSW in 2005 (90,610 deliveries)
Consequences of Perineal Trauma

- Incontinence
- Dyspareunia
- Prolapse

22-37%

Anal Incontinence

Anal Sphincteric Function
- Muscle integrity
- Neural connections

Internal anal sphincter 70%
External anal sphincter 30%
Sphincteric Function Tests

- Anal endosonography
- Manometry

Do we recognise sphincteric damage?

1/3 not recognised

Only 30% symptomatic

Episiotomy

- Haemorrhage
- Anal sphincteric trauma
- Extension
- Pain

But ↓ anterior perineal lacerations

Classification of Perineal Tears (RCOG Guidelines 2001)

1° Vaginal epithelium
2° Perineal muscles (BC, TP, PC)
3° Anal sphincter – (a) <50% EAS (b) >50% EAS (c) IAS
4° Anal epithelium torn
Assessment includes determination of damage. With a first degree tear or incision, only the fourchette is damaged.

A second degree tear or incision has damage beyond the fourchette, into the muscle tissue but not involving the anal sphincter.

To suture or not:

1° -

2° - ?poorer healing

Suture Vagina & Muscles
Leave Skin Unsutured

Continuous or Interrupted?
7 RCTs cts subcuticular causes less pain, reduced need for analgesia but no difference in dyspareunia.

Interrupted absorbable sutures are inserted into the levatores ani.
Skin Closure Methods

● A continuous sub-cuticular repair of the perineal skin.
● Interrupted mattress sutures can be used to close the skin.

Suture material

RCTs found dexon/vicryl superior to catgut

- Perineal pain
- Analgesic use
- Dehiscence
- Resuturing

Sutures

There are three kinds of absorbable suture:

Dexon/Vicryl: This is a synthetic material which takes 3 or 4 weeks to dissolve and is dissolved by hydrolysis. It causes less pain as it has a no inflammation reaction. Also it is easy to use and does not tangle like catgut.

Catgut (plain): This is a natural material that takes 4 or 5 days to dissolve and is therefore not in place long enough for the healing of a vaginal repair.

Chromic Catgut: This is a catgut that has been treated with chromic acid to keep it from rapidly dissolving. It is ideal for the repair of vaginal tears. It takes about 10 days to partially dissolve and by 20 days dissolution is complete. Catgut tends to kink and tangle if it is not watched.

End-to-end primary anal sphincter repair using figure-of-eight sutures

Sultan AH et al 1999 (BJOG)
Post Repair Management

- Catheter
- Antibiotics
- Stool softeners
- Counselling

Medicolegal considerations

- Not recognising a tear is an issue
- Leaving behind a swab is not defensible
- Poor repair results can be challenged
- Wise to adequately counsel
- Provide instructions about after care
- Review – provide sensitive after care
- Perineal care clinic

Where should the repair be conducted and by whom?

Perineal Pain Management
(Mayday Hosp Protocol)

1. Use analgesics:
   - 30 minutes prior to coitus

2. Inject:
   - 0.5% bupivacaine 10mls
   - 1500iu hyaluronidase
   - 40mg methylprednisolone

3. Repeat in 6 weeks

- Dilators
- Psychosexual counselling
- Perineoplasty
Can perineal trauma be prevented

- Antenatal perineal massage (3 RCTs)
  - Reduced risk of perineal trauma needing suturing
  - Reduced risk of episiotomies
  - Less pain

But - No difference in all degrees of tears
- Instrumental delivery
- Sexual satisfaction
- Anal or urinary incontinence.

Protecting the perineum

- Water Birth (7 RCTs)
  No difference in tears, operative delivery or CSs.

- Upright/lateral vs lithotomy (18 studies)
  - Shorter 2nd stage, fewer forceps, fewer episiotomies, more 2nd deg tears

- When to push (1 RCT) — delayed pushing fewer difficult deliveries, no difference in tears and episiotomy

Reference List
