Rehabilitation of Third- and Fourth-Degree Perineal Tears

Third and Fourth Degree Tears During Labor and Delivery

- Definitions of Tears
  - Third-Degree: any dysfunction of the external anal sphincter
  - Fourth-Degree: disruption of the external and internal anal sphincter and the rectal mucosa

- Rates of trauma and perineal morbidity are reported to be greater in certain populations (Albers 1999, Albers 2006, Hastings-Tolsma 2007, Williams 2007, Simpson 2005)
  - Primigravid women
  - Use of regional anesthesia
  - Birth weight greater than 3500 grams (7.7 lbs)
  - Immediate pushing in second stage of labor (vs. delayed pushing)
  - Prolonged 2nd stage of labor
  - Closed glottis pushing upon command vs. bearing down with urge
  - Instrumental birth
  - Deflexed fetal head

- Independent risk factors for 3rd and 4th degree tears include:
  - Primiparous delivery
  - Fetal postmaturity
  - External fundal pressure at end of delivery
  - Midline episiotomy
  - Increased birth weight
  - Dyssnergic defecation during pregnancy (Marchand 2009)

- Fetal position that increases risk
  - Occiput posterior
  - Cephalopelvic disproportion
  - Fetal shoulder dystocia

- Assisted delivery
  - Forceps and vacuum extractor
    - Increased risk of anal sphincter injury
    - Increased odds of pelvic floor disorders especially POP and overactive bladder
    - Increased risk of vaginal tears
  - Utilized in abnormal fetal lie, fetal distress and macrosomia

  - Patient education
  - Perineal massage during last 6 weeks of pregnancy
  - Avoid closed glottis (valsalva) pushing during 2nd stage of labor
  - “Laboring down”- 1-2 hours of rest after complete dilation if using an epidural
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Section on Women’s Health

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All donations to the SOWH Endowment for Research Excellence are tax-deductible. Please make checks payable to: The Foundation for Physical Therapy
o Encourage upright or lateral positioning for 2nd stage of labor and delivery
o Physician slows delivery of baby’s head
o Do not use perineal massage or compress during delivery unless mother needs distraction or comfort

• Laceration repair
  o Tearing is better than an episiotomy
  o “Fleming method” of suturing: leaves subcuticular layer unsutured unless gapping
  o Dexon or Vicryl sutures
  o Oral ibuprofen for pain relief
  o Wound complications occur in about 7.3% (Strock 2013)
  o Encourage pelvic floor exercises immediately after childbirth

• Risk factors for breakdown of laceration repair (Williams 2006)
  o Long second stage of labor (greater than 2 ½ hours)
  o Operative vaginal delivery
  o Mediolateral episiotomy
  o 3rd- or 4th-degree laceration
  o Meconium-stained amniotic fluid

Postpartum Complications and Rehabilitation

• Anal Incontinence
  o Any involuntary loss of solid, liquid or gas
  o Fecal incontinence is the involuntary loss of formed stool
  o External anal sphincter is responsible for 10-20% of resting continence
  o Internal anal sphincter is responsible for the remainder
  o The most common cause of anal incontinence in women is obstetrical trauma (Toglia 2009)
  o Rectal urgency is the strongest predictor of anal incontinence (Hanaway 2008)
  o Development of anal incontinence usually occurs with failure of multiple systems

• Anal Incontinence in Women with Obstetrical Trauma
  o 30% of women who report symptoms of urgency or incontinence of the bowel have disruption to the sphincters as reported on endoanal ultrasound
  o At 6 week follow up, only about 15% of women report symptoms (Bagade 2010)
  o However, prevalence of anal incontinence after 3rd or 4th degree tear is estimated between 36-63% (Toglia 2009)
  o Type of repair is indicative of symptoms (Farrell 2012)
    • Overlapping
    • End to end
    • End to end repair has been shown to have less flatal incontinence
  o Up to 85% of women who have repair at the time of delivery still show structural defect on endoanal ultrasound 8-12 weeks after delivery (Toglia 2009)
The Section on Women’s Health is proud to announce the course schedule for 2014.
We hope you will be able to take advantage of the variety of course options and locations throughout the country.

Registration for 2014 educational courses and the 2014 Fall Conference is now open on our website.
www.womenshealthaptap.org/education/regional_courses/index.cfm

For updates on courses and registration openings, please follow the Section’s Twitter and Facebook pages.

### Pelvic Physical Therapy 1
- **January 17-19, 2014**
  - Speaker: Lori Mize, PT, DPT, WCS
  - Carina Sircusca Majzun, PT, DPT
  - Greenville, SC
- **March 21-23, 2014**
  - Speaker: Lori Mize, PT, DPT, WCS
  - Houston, TX
- **June 20-22, 2014**
  - Speakers: Lori Mize, PT, DPT, WCS
  - MJ Straughal, PT, BCB-PMD
  - Baton Rouge, LA
- **July 11-13, 2014**
  - Speakers: Lori Mize, PT, DPT, WCS
  - Barb Settles-Huge, PT
  - Des Moines, IA
- **October 10-12, 2014**
  - Speaker: Carina Sircusca Majzun, PT, DPT
  - East Lansing, MI
- **November 14-16, 2014**
  - Speaker: Barb Settles-Huge, PT
  - Boca Raton, FL

### Pelvic Physical Therapy 2
- **February 28-March 2, 2014**
  - Speaker: MJ Straughal, PT, BCB-PMD
  - Portland, OR
- **April 25-27, 2014**
  - Speaker: Barb Settles-Huge, PT
  - Madison, WI
- **August 1-3, 2014**
  - Speaker: Carina Sircusca Majzun, PT, DPT
  - Towson, MD

### Pelvic Physical Therapy 3
- **June 27-29, 2014**
  - Speaker: MJ Straughal, PT, BCIA-PMD
  - Rochester, NY
- **September 12-14, 2014**
  - Speaker: MJ Straughal, PT, BCIA-PMD
  - Portland, OR
  - (Hybrid Course – details coming soon)
- **November 7-9, 2014**
  - Speaker: MJ Straughal, PT, BCIA-PMD
  - Madison, WI

### Fundamental Topics in Pregnancy and Postpartum Physical Therapy
- **March 28-30, 2014**
  - Speakers: Suzanne Badillo, PT, WCS
  - Susan Giglio, PT, RYT
  - Baton Rouge, LA
- **May 16-18, 2014**
  - Speakers: Karen Litos, PT, MPT
  - Valerie Bobb, PT, MPT, WCS, ATC
  - East Lansing, MI
- **July 25-27, 2014**
  - Speaker: Suzanne Badillo, PT, WCS
  - Edina, MN
- **August 22-24, 2014**
  - Speaker: Susan Giglio, PT, RYT
  - Karen Litos, PT, MPT
  - Longmont, CO

### Advanced Topics in Pregnancy and Postpartum Physical Therapy
- **February 21-23, 2014**
  - Speaker: Susan Giglio, PT, RYT
  - St. Louis, MO
- **May 4-6, 2014**
  - Speaker: Susan Giglio, PT, RYT
  - Susan Steffes, PT
  - Baltimore, MD

### The Physical Therapist in Labor & Delivery: Advanced Techniques in Labor Support
- **October 24-26, 2014**
  - Speaker: Susan Steffes, PT, CD(DONA)
  - Austin, TX

Check website for new courses throughout the year!

This course is part of the Section on Women’s Health Certificate of Achievement in Pelvic Physical Therapy (CAPP-Pelvic) Program.

For more information on this course, please visit www.womenshealthaptap.org/capp.cfm

For more details on CAPP, go to http://www.womenshealthaptap.org/capp.cfm

For more information on the Section on Women’s Health sponsored courses, go to http://www.womenshealthaptap.org/education/education.cfm or contact the SOWH at scwh@apta.org or 703-610-0224.
Rectovaginal fistulas can also occur after repairs and are often not discovered until many weeks after the tear.

Women who sustain a 3rd degree tear have a 7% chance of sustaining a tear in subsequent deliveries and women who sustain a 4th degree tear have an 11% increased chance of sustaining a tear in subsequent deliveries (Jango 2012)

At 5-10 year follow up women with a third or fourth degree tear are twice as likely to sustain bowel continence issues (Evers 2012)

Sexual function following anal sphincter repair (Pauls 2007)

- Sexual functioning is similar between women who have had a sphincter repair and those who have not
- However there is a higher correlation of sexual dysfunction with women who have accompanying fecal incontinence

Evaluation of the patient with obstetrical trauma

- Thorough history of symptoms
- History of labor and delivery
- Type of repair performed
- History of objective measures performed- anal manometry, endoanal ultrasound etc

Rehabilitation of Anal Incontinence

- Biofeedback is the most universally recognized for treatment of anal incontinence (Norton 2008)
- Biofeedback can consist of sEMG, rectal balloon training, or sensory retraining
- Possible dietary modifications
- Proper skin care

Preventative Rehabilitation of 3rd and 4th Degree Perineal Tears

- Automatic referral after incidence of third or fourth degree tear
- Evaluation 4 weeks after primary repair
- Instruction in basic Kegel exercises
- Prevention of increased intra-abdominal pressure
- After 6 week physician check up: re-evaluation by physical therapist
- If asymptomatic: maintenance program given
- If symptomatic pelvic floor therapy plan of care written and carried out


Cochrane Database Syst Rev. 2006;[1]:CD005123.


www.soap.org/media/newsletters/winter_spring2001/current_review.htm Accessed 1/14/2011