

## A PROSPECTIVE ANALYSIS OF 120 PATIENTS WITH THIRD AND FOURTH DEGREE OBSTETRIC TEARS

### Hypothesis / aims of study

Patients with 3rd and 4th degree tears were identified and surveyed for functional (FISI) and Quality of Life (QOL) fecal incontinence outcomes.

### Study design, materials and methods

All patients were retrospectively identified using ICD codes for 3rd and 4th degree tears between 1995-2010 (n=6712). IRB approval required the gynecologists' permission to contact patients (n=1092). Consented patients were given the FISI and FIQOL by mail or phone (n=120). General demographics were obtained from the EMR including age at delivery, interval since delivery, ethnicity, gravida, parity, gestational age, induction, epidural, birth weight (BW), apgar, head circumference, BMI, comorbidities, instrumentation, length of 2nd stage labor, episiotomy, degree of tear. Wilcoxon rank-sum tests were used to analyze the laceration groups. The cohort was stratified by age at delivery, symptoms, BMI, injury, instrumentation, interval from birth. Univariate analyses were run between subgroups involving Spearman correlations between QOL and FISI.

### Results

Our cohort was compromised of 91 3rd degree, and 23 4th degree tears. Mean age at delivery was 33 +4 years. Mean gravida was 1.6 +0.9. Mean BMI was 22.7 +3.1. The number of patients with a forcep delivery was 72 (62.1%). Coping (-0.73, p <0.0001) and embarrassment (-0.50, p = 0.009) were negatively associated with FISI scores when BW was greater than 8.8 lbs. Embarrassment was negatively associated with FISI scores (-0.45, p= 0.02) in patients with a BMI>30. Coping, depression, and embarrassment were associated with FISI scores with Spearman correlations ranging from -0.25 to -0.55, all p-values<0.05 when age at delivery> 40 group. Embarrassment was significantly higher 5-10 years (mean and standard deviation: 3.9 + 0.3; median and range: 4.0 (2.7,4.0)) from delivery, than <5 years from delivery (mean and standard deviation: 3.5 + 0.9; median and range: 4.0 (1.3,4.0)) or >10 years (mean and standard deviation: 3.6 +0.7; median and range: 4.0 (1.7,4.0)) from delivery (p = 0.01). No significant differences were seen between laceration groups, instrumentation or episiotomy.

### Interpretation of results

Maternal factors and BW appear to effect FI outcomes more than birth factors such as instrumentation, lacerations or episiotomy.

### Concluding message

Further studies are needed to truly elucidate the etiology of FI and contributory risk factors.

### Disclosures

**Funding:** Institutional Grant Evergreen **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** IRB Helsinki: Yes **Informed Consent:** Yes