**INTRODUCTION**

- Pelvic organ prolapse affects 300,000 women annually.
- Lifetime risk of undergoing surgery for POP is 12.6%.
- The “July Effect” describes the phenomenon that the influx of new residents and fellows at the start of the academic calendar is associated with increased rates of poor outcomes amongst patients.
- Our aim was to evaluate if month of year relative to resident/fellowship promotions in July affects operating room (OR) time, complication rates, and prolapse recurrence.

**METHODS**

- This was a retrospective study analyzing all minimally invasive sacrocolpopexy (MISC) and uterosacral ligament suspension procedures performed at a single academic center from January 2009 and August 2015.
- Demographics, medical comorbidities, history of prior hysterectomy, intraoperative and postoperative factors were reviewed.
- Primary outcomes were defined as operative time, complication rates, and recurrence of prolapse.
- Primary outcomes were compared between months, with June defined as month 12 and July defined as month 1.
- Linear regression analyzed OR time by month and logistic regression analyzed prolapse recurrence and complications by month while adjusting for confounders.
- Candidate variables with p<0.2 on univariate analysis were used in final modeling with multivariable regression.

**RESULTS**

- A total of 1007 subjects from 7 primary surgeons.
- Mean age: 59.9±19.4, BMI: 27.6±4.2, Gravity: 3.0±1.5, and Parity: 2.6±1.1.
- Majority had POP-Q stage III (67.7%) or stage II prolapse (25.6%).
- MISC represented 81.0% of surgeries (58.8% laparoscopic, 41.2% robotic-assisted).
- Most USLS were performed vaginally (68.1%) vs. laparoscopic/robotic.
- Median follow-up was 34 weeks (IQR=11–82).

**RESULTS (CONTINUED)**

- **Table 1: Linear Regression of OR Time**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B (min)</th>
<th>Std. Error</th>
<th>β</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>223.47</td>
<td>7.57</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>Month of Surgery</td>
<td>-0.649</td>
<td>0.57</td>
<td>-0.034</td>
<td>0.259</td>
</tr>
<tr>
<td>MISC or USLS</td>
<td>-36.39</td>
<td>5.21</td>
<td>-0.217</td>
<td>0.000</td>
</tr>
<tr>
<td>Conversion to Laparotomy</td>
<td>112.92</td>
<td>14.59</td>
<td>0.235</td>
<td>0.000</td>
</tr>
<tr>
<td>Concomitant Hysterectomy</td>
<td>33.44</td>
<td>4.38</td>
<td>0.239</td>
<td>0.000</td>
</tr>
</tbody>
</table>

- Prolapse recurrence was identified in 9.4%.
- Month was not a significant predictor of recurrence on multivariable logistic regression (OR=0.95, 95% CI=0.89-1.02) where MISC had less recurrence than USLS (OR=0.33, 95% CI=0.18-0.60, p=0.00).
- Month of surgery MISC vs. USLS, B=36.4 min., Conversion to laparotomy (B=112.92 min, and concomitant hysterectomy (B=33.4 min) all increased OR time (all p<0.001 on multivariable linear regression)
- The most common complications were readmission/return to OR (4.5%) and infections (4.4%, excluding UTI)

**CONCLUSIONS**

- MISC demonstrated lower rates of complications and prolapse recurrence when compared to USLS.
- Month of year relative to resident/fellowship promotion did not impact OR time, complications, or prolapse recurrence, debunking the myth of worse surgical outcomes earlier in the academic year.