INTRODUCTION

There is significant variability in our institution with regards to perioperative pain control in children undergoing circumcision and other urologic procedures, such as hypospadias or penile curvature repairs. A standardization of anesthetic technique for perioperative pain control was instituted for circumcision-only procedures in the past. Both anesthesiologists and urologists in our institution agreed on this. However, for patients who are undergoing hypospadias and penile curvature repairs, in addition to circumcision (combined procedures), some patients receive caudal block while others receive dorsal penile block (DPNB) based on the preference of the anesthesiologists and the surgeons.

AIM

• Variability in anesthetic practice can lead to medical errors and decreased efficiency.
• One way of decreasing variability and improving outcomes is through standardization.¹
• We propose standardization of our anesthetic practice in children undergoing these combined urologic procedures.

METHODS

• A chart review was done to assess compliance from the previous anesthetic protocol for circumcision alone.
• A similar assessment will be performed for patients undergoing combined procedures.
• Using current literature outcomes²,³, a proposal for further standardizing our anesthetic practice for perioperative pain management for patients undergoing combined procedures will be created.
• We plan to follow up three months after the implementation of the new protocol to analyze compliance with the standardization.

Table 1. Narcotic use and time to rescue for patients receiving caudal and DPNB undergoing combined urologic procedures (3-month period)

<table>
<thead>
<tr>
<th>Block</th>
<th>N</th>
<th>Narcotics (mg/kg, morphine equivalent)</th>
<th>% receiving narcotics after induction</th>
<th>% receiving narcotics in PACU</th>
<th>Average PACU time to rescue narcotic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caudal</td>
<td>10</td>
<td>0.24</td>
<td>20.0%</td>
<td>30.0%</td>
<td>20</td>
</tr>
<tr>
<td>DPNB</td>
<td>11</td>
<td>0.38</td>
<td>54.5%</td>
<td>45.5%</td>
<td>14</td>
</tr>
</tbody>
</table>

DISCUSSION

Although small in numbers, there was 100 percent compliance with our standardization in regards to circumcision alone. We plan on auditing more charts to look at the trend for this. A survey of our anesthesiologists and urology colleagues, although incomplete, showed a trend toward the use of caudal for combined procedures. We plan on meeting our urologist colleagues to finalize the anesthetic protocol for combined circumcision and other urologic procedures. We recommend to further look at compliance rate, efficacy, and efficiency of this test of change in the future.

CONCLUSION

• Our post-protocol data is still pending.
• However, based on the data that we have analyzed so far from our chart review, we expect improved efficiency that could lead to less operating room and recovery room times and improved costs with no worsening of postoperative pain.

REFERENCES