Background

• Immediate postpartum implant (IPI) placement prevents rapid repeat pregnancies in adolescents.¹
• Postpartum depression (PPD) affects approximately 1 in 10 women.²
• Progestin-only methods of contraception, such as the contraceptive implant, and their relationship with depression is unclear and understudied.

Immediate postpartum implant (IPI) placement in adolescents?

Methods

• RETROSPECTIVE COHORT OF ADOLESCENTS
  • 13-24 years of age. Prenatal and postnatal care provided by the Colorado Adolescent Maternity Program (CAMP). Delivered at the University of Colorado Hospital. Pre- and postnatal depression screening performed at CAMP.
  • Medical records review to identify: demographic, reproductive, & delivery characteristics; postpartum contraceptive initiation; pre- and postnatal depression scores.
  • Depression evaluated using the Center for Epidemiologic Studies Depression scale (CES-D; prenatally⁴) and the Edinburgh Postpartum Depression Scale (EPDS; postnatally⁵).
  • CES-D positive if score ≥24; EPDS positive if score ≥10.⁶
  • We compared women initiating contraceptive implants within 14 days of delivery (IPI) vs all others.

Results

PRIMARY OUTCOME: Positive EPDS at 6-weeks postpartum³

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>IPI n=170</th>
<th>Other n=332</th>
<th>p-value or OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>19.3 (14.3-22.2)</td>
<td>19.4 (13.9-22.2)</td>
<td>0.64</td>
</tr>
<tr>
<td>Primigravid</td>
<td>79.4%</td>
<td>74.7%</td>
<td>1.31 (0.74-2.04)</td>
</tr>
<tr>
<td>Primiparous</td>
<td>87.6%</td>
<td>84.6%</td>
<td>1.29 (0.75-2.22)</td>
</tr>
<tr>
<td>In school or graduated</td>
<td>69.5%</td>
<td>63.0%</td>
<td>1.34 (0.89-2.00)</td>
</tr>
<tr>
<td>Has relationship with father of child</td>
<td>89.3%</td>
<td>89.7%</td>
<td>0.96 (0.52-1.77)</td>
</tr>
<tr>
<td>Lives with parents</td>
<td>53.4%</td>
<td>59.5%</td>
<td>0.78 (0.52-1.17)</td>
</tr>
<tr>
<td>CES-D ≥24</td>
<td>12.0%</td>
<td>15.2%</td>
<td>0.77 (0.44-1.34)</td>
</tr>
<tr>
<td>C-section delivery</td>
<td>16.3%</td>
<td>12.9%</td>
<td>0.77 (0.48-1.31)</td>
</tr>
<tr>
<td>Preterm birth (&lt;37 weeks gestation)</td>
<td>19.9%</td>
<td>11.9%</td>
<td>1.83 (1.10-3.05)</td>
</tr>
<tr>
<td>Low birth weight (&lt;2500 gms)</td>
<td>12.9%</td>
<td>8.3%</td>
<td>1.64 (0.90-2.98)</td>
</tr>
</tbody>
</table>

Discussion

• IPI placement reduces rapid repeat pregnancy, is cost-effective, highly desirable for patients, and has a high continuation rate in adolescents.¹ ³
• IPI placement does not interfere with breastfeeding or increase breakthrough bleeding.
• IPI placement does not increase rate of postpartum depression in adolescent women. In this study, IPI users had lower rates of postpartum depression than those initiating other methods.
• Providers should encourage adolescent mothers to choose whichever highly-effective contraceptive method they prefer for postpartum use and be reassured that progestin-containing methods do not increase PPD.

References


Acknowledgements

We would like to thank the patients and staff of the Colorado Adolescent Maternity Program!