Acute otitis media after forceps delivery

While running an ambulatory paediatric clinic, the mother of a crying baby wondered whether forceps delivered babies were more prone to otitis than other babies. To our knowledge, this association has not been reported. But, on the other hand, facial nerve injury is more common among those delivered by forceps; it is caused by compression of diploic bone of the mastoid process where the facial nerve is located superficially. It is clear that this kind of extraction applies some pressure over the ear of the baby. The head vulnerability is well known: long term consequences have been recognised after mild head corner. Providing it isn’t libellous or obscene, it will be posted within seven days. You can retrieve it by clicking on “read eletters” on our homepage.

The editors will decide as before whether to also publish it in a future paper issue.

AOM was diagnosed by a history of acute onset of signs and symptoms and otoscopic examination of the ear drum. Of 1449 deliveries, there were: 754 NO, 217 F, 52 VA, and 426 CS (caesarean sections). AOM had been recorded in 234 (31.0%) of children born by NO, 87 (40.0%) of F, 13 (28.8%) of VA, and 124 (29.1%) of CS.

The analysis showed that forceps delivered babies were associated with an increase in proportion of AOM (odds ratio (OR) 1.48; 95% confidence intervals (CI) 1.08 to 2.03; \( p = 0.015 \)) compared with NO.

There were no differences in AOM proportions between VA and NO (OR 0.85; 95% CI 0.46 to 1.58; \( p > 0.3 \)). And there were no differences in AOM proportions between CS and NO (OR 0.91; 95% CI 0.70 to 1.18; \( p > 0.3 \)).

Our finding could be confirmed or discarded by ongoing longitudinal studies. If it is confirmed, it will strengthen the resolve to pay careful attention to the comments of our patients.

It is already known that VA is at least as safe as forceps for the mother and the neonate. Long term consequences of operative vaginal delivery need to be explored: a prospective study should be undertaken to find if this association really exists.

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References

Table 1 Patient characteristics

<table>
<thead>
<tr>
<th>Feature</th>
<th>Non-operative delivery (n = 754)</th>
<th>Forceps delivery (n = 217)</th>
<th>Vacuum delivery (n = 52)</th>
<th>Caesarean section (n = 426)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth weight mean (SD)</td>
<td>3315.2 (400.7)*</td>
<td>3429.3 (388.2)</td>
<td>3496.2 (416.7)</td>
<td>3383.4 (467.8)</td>
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<tr>
<td>Ratio</td>
<td>1.08</td>
<td>1.18</td>
<td>1.42</td>
<td>1.34</td>
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<tr>
<td>male:female</td>
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<td>Newborns admitted to special care (%)</td>
<td>24 (3.1)*</td>
<td>11 (5.0)*</td>
<td>8 (15.3)*</td>
<td>25 (5.8)*</td>
</tr>
<tr>
<td>Age, months, at AOM diagnosis mean (SD)</td>
<td>18.2 (12.9)</td>
<td>17.4 (10.8)</td>
<td>23.7 (12.6)*</td>
<td>18.9 (13.0)</td>
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* \( p < 0.05 \).

Acknowledgements
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