Does antenatal pelvic dilation predict renal scarring?

N D Plant, R J Hornung, M G Coulthard, M J Keir, J N S Matthews, S C Robson


Table 1  Results of 239 children with moderate antenatal renal pelvic dilation

<table>
<thead>
<tr>
<th>Study scan</th>
<th>Prior scan</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>179</td>
<td>10</td>
</tr>
<tr>
<td>Boys</td>
<td>127 (71)</td>
<td>6 (60)</td>
</tr>
<tr>
<td>Girls</td>
<td>52 (29)</td>
<td>4 (40)</td>
</tr>
<tr>
<td>All</td>
<td>12 (7)</td>
<td>5 (50)</td>
</tr>
<tr>
<td>Boys</td>
<td>7 (6)</td>
<td>3 (50)</td>
</tr>
<tr>
<td>Girls</td>
<td>5 (10)</td>
<td>2 (50)</td>
</tr>
<tr>
<td>Children with scars</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Boys</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Girls</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Mean anteroposterior renal pelvic diameter (mm)</td>
<td>8.1</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Values are number (%). Scan is dimercaptosuccinic acid scan.

*Of these 50, 30 families did not respond to contact by either their general practitioner or our group, 11 families did not attend for their child’s booked dimercaptosuccinic acid scan despite giving consent, five families refused to participate, and four general practitioners did not allow us to contact the family.

†Details of previous urinary infections available in all but two boys and one girl.
Ten of the 133 study boys (7.5%, 95% CI 4.1 to 13.3) and seven of 56 girls (12.5%, 95% CI 6.2 to 23.6) had urine infections, compared with population rates of 3.1% and 8.0% respectively. The probability of 10 or fewer infections among 133 boys was 0.88 to 0.96 for a wide range of N, and for seven or fewer among 56 girls was 0.79 to 0.87, so these rates were not unusual compared with our population controls.

Our data indicate that moderate antenatal renal pelvic dilation of 5–15 mm is not a marker for an increased rate of urine infection or renal scarring, and suggests that it is inappropriate to perform cystograms on these babies as newborns.

ACKNOWLEDGEMENTS
This research was supported by a grant from the Newcastle University Hospitals Special Trustees. We thank Marjorie Renwick, Robyn Marley, Judith Rankin, and John Scott for their help with the NorCAS database. We are also grateful to the general practitioners and paediatricians who provided information on patients.

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Competing interests: none declared

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Accepted 20 February 2005

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doi: 10.1136/adc.2004.054569

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