Short Reports

1970; Wille et al., 1970). There were only two apparent false-negatives; this in itself is difficult to interpret since the delay in plating the urine in these two cases was not timed, and the routine cultures may have been falsely positive from overgrowth of contaminants.

In the 15 timed cases, the longest delay was 4 hours from micturition and dip-slide inoculation to plating in the bacteriology laboratory, with a mean delay of 2½ hours. This delay was not associated with an overgrowth of contaminant organisms. These cases do illustrate the magnitude of the delay between micturition and arrival of sample in the laboratory, in an average hospital specimen collection service. These long delays do not appear to have materially affected the results of culture in this very small series.

Differentiation and identification of the organisms on the dip-slide were more difficult than on routine culture; the dip-slides were also not entirely suitable for subculture for further examination of the flora and its antibiotic sensitivities. This suggests that the culture slides might not be suitable for investigation of children with acute urinary tract infection. The dip-slide does not assist in the problem of obtaining a clean urine sample from a young child, but does offer a useful screening test for urinary infection. Perhaps its most significant contribution lies in the long-term management of urinary tract infections in children, particularly in excluding relapse or reinfection. A supply of dip-slides in the home, with instructions to the parents about the collection of clean samples, would avoid some of the frustrating hours parents have to spend in outpatient departments waiting for their children to pass urine.

Summary

The results of 73 dip inoculum urine cultures were compared with the results after routine plating and culture. There was complete agreement in 63 cases. The dip-slides gave 7 falsely-positive results and 2 falsely-negative results. It is suggested that the dip-slides might provide a useful aid in the long-term management of urinary tract infection in children, particularly in excluding relapse or reinfection.

References


Birthweight Distribution in Congenital Pyloric Stenosis

In 1970 an epidemiological and family study was made on the cases of operated congenital pyloric stenosis (CPS) born in Budapest, 1962–1967. The incidence and birthweight distribution may be of general interest.

Material and Methods

The index patients were ascertained from the registers of all paediatric surgery departments in Budapest. They were the infants with CPS born alive between 1962 and 1967 of parents living in Budapest, and who were surgically treated. The parents were sent a questionnaire with a letter explaining the investigation. Information on 148 index patients out of a total of 159 was obtained. The diagnosis of CPS in relatives was checked from hospital records. The birthweight distribution of all live births in Budapest, 1962–1967, was used as the control group (Demographic Year Books). The gestational ages of livebirths in Budapest are not available, so that the data of a separate Hungarian study (Fekete et al., 1968) were used.

Incidence of CPS in Budapest 1962–1967

In Budapest, capital of Hungary, with a population of two million, 159 cases of CPS were operated on out of 108,966 livebirths in 1962–1967. Thus the incidence was 1·46/1000 livebirths. The variation in incidence in the individual years did not reach the level of significance ($\chi^2 = 2·71; P < 0·05$). 77·4% of all cases were male. The incidence is comparable to the rates reported in other Caucasian populations, but higher than those reported in Negro and Mongolian populations (Shim, Campbell, and Wright, 1970).

Birthweight Distribution of CPS

No significant correlations were found between the incidence of CPS and maternal age, birth order, paternal age, monthly distribution, socioeconomic status of parents, or the presence of other malformations.
TABLE I
Birthweight (g) Distribution and Mean Birthweight of Infants with Congenital Pyloric Stenosis in Budapest, 1962–1967

<table>
<thead>
<tr>
<th>Sex</th>
<th>Group</th>
<th>Birthweight (g)</th>
<th>Distribution</th>
<th>Mean Birthweight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1000–1499 n (%)</td>
<td>1500–1999 n (%)</td>
<td>2000–2499 n (%)</td>
</tr>
<tr>
<td>Male</td>
<td>CPS cases</td>
<td>1532 2·7</td>
<td>1443 2·6</td>
<td>3476 6·2</td>
</tr>
<tr>
<td></td>
<td>Controls</td>
<td>56,472</td>
<td>1086 2·8</td>
<td>1347 1·8</td>
</tr>
<tr>
<td>Female</td>
<td>CPS cases</td>
<td>1553 3·0</td>
<td>1481 2·8</td>
<td>3890 7·4</td>
</tr>
<tr>
<td></td>
<td>Controls</td>
<td>52,490</td>
<td>1086 2·8</td>
<td>1347 1·8</td>
</tr>
</tbody>
</table>

The frequency of CPS was higher above 3500 g, but particularly in the birthweight groups of 4000 to 4499 and 4500 g +. There was a similar trend among females, but perhaps because of small numbers this was not significant ($\chi^2 = 4·38; P > 0·05$). The higher frequency of CPS in the heavier boys was not the result of the prolongation of gestation (Table II, Fig. 2). Thus 23·8% of CPS cases were born

TABLE II
Distribution of Length of Gestation Among Male Cases of Congenital Pyloric Stenosis

<table>
<thead>
<tr>
<th>Groups</th>
<th>Gestation (wk)</th>
<th>Mean*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>123 CPS cases</td>
<td>No.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2·8</td>
</tr>
<tr>
<td>Mean birthweight</td>
<td>SD</td>
<td>363</td>
</tr>
<tr>
<td>1642 Controls</td>
<td>No.</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>8·9</td>
</tr>
<tr>
<td>Mean birthweight</td>
<td>SD</td>
<td>2442</td>
</tr>
</tbody>
</table>

*18 of the 123 CPS cases were untraced; therefore the data above refer to 105 cases.
after the 41st week, against 27.4% of control cases.

The frequency of CPS was lower in boys born preterm. This lower incidence of CPS in premature low birthweight infants has been reported previously (e.g. Henderson, Brown, and Taylor, 1952; Wilson, 1960).

The higher birthweight in patients with pyloric stenosis has previously been commented on by Malmberg (1949) and by Shim et al. (1970); but this is the first demonstration that this higher birthweight is not due to longer gestation. The higher incidence of CPS in the higher birthweight group is consistent with the observation that CPS is more frequent in muscular men (Carter, 1961).

The family findings are presented in Table III, and in general correspond to the more precise information obtained by Carter and Evans (1969).

**Summary**

The incidence of operated congenital pyloric stenosis was 1.46/1000 livebirths in Budapest, 1962–1967. In males, the frequency was significantly higher in infants with birthweight over 3500 g, particularly so when over 4000 g. This higher frequency cannot be explained by the longer mean gestational period.

**REFERENCES**


**Accidental Poisoning with Thyroid Extract Treated by Exchange Transfusion**

Ingestion of large quantities of thyroid hormone may reproduce the symptoms of thyrotoxicosis (Levy and Gilger, 1957; Schottstaedt and Smoller, 1966; Funderburk and Spaulding, 1970). Two sisters were observed after accidental ingestion of large amounts of thyroid extract, and one was treated by exchange transfusion.

**Case Report**

At 11.30 hours the mother of two girls aged 3 and 2 found them swallowing some tablets of thyroid extract. It was calculated that the 2 girls had swallowed 38 tablets of 50 mg or a total of 1900 mg. At 1300 hours gastric lavages were performed and the children were referred to hospital.

On admission at 1500 hours, the elder girl (Case 1, 12 kg) had a temperature of 37 °C; she was agitated and had a sinus tachycardia of 150/min with a blood pressure of 110/60 mmHg. No other symptoms were observed. The younger girl (Case 2, 11 kg) showed no clinical signs.

The white blood count in Case 1 was 17,000/mm³ with 72% neutrophils, and in Case 2 11,900/mm³ with 47% neutrophils. A mild hypokalaemia (3.1 mEq/l.) was noted in both.

Gastric lavage was performed again and a laxative given. At 1900 hours we received the results of the serum thyroxine (T₄) and of the T₃ resin uptake (T₃RU) of the blood drawn at the time of admission. The T₄ values were (Table) Case 1 20 µg I/100 ml, Case 2 12 µg I/100 ml.

Both children were treated with barbiturates and antipyretics. With the intention of hindering develop-
Birthweight distribution in congenital pyloric stenosis.

A Czeizel

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