Abstracts

Background and Aims The use of osteopathic manipulative treatment (OMT) in preterm infants has been documented and results from previous studies suggest the association between OMT and length of stay (LOS) reduction, as well as significant improvement in several clinical outcomes. The aim of the present study is to show the effect of OMT on LOS in a sample of premature infants.

Methods A double blinded randomized controlled trial was conducted on preterm newborns admitted in a single NICU between 2010–2011. N=51 subjects free of medical complications and with gestational age >26 and <38 weeks were enrolled and randomized in two groups: study group (N=21) and control group (N=30). All subjects received routine pediatric care and OMT was performed to the study group for the entire period of hospitalization. Endpoints of the study included differences in LOS and daily weight gain.

Results Results showed a significant association between OMT and LOS reduction (mean difference between treated and control group: –1.787; 95% c.i. –3.555, –0.0015; p<0.05). OMT was not associated to any change in daily weight gain.

Conclusions The present study confirms that OMT could play an important role in the management of preterm infants hospitalization.

972 MANAGING ENT EMERGENCIES NEEDING TRANSFER TO PICU: THE EXTENDED TRANSPORT TEAM
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Background Paediatric ENT emergencies are rare but can be life-threatening and challenging to manage. In UK paediatric ENT services are centralised, and adult ENT surgeons and anaesthetists provide cover in local hospital (DGH). North West and North Wales Paediatric Transport Service (NWTS) UK is a specialist transport team.

Method Retrospective audit 12 months ENT transfers (NWTS database).

Results 74/932 (8%) referrals had ENT diagnosis. Feedback from DGH teams highlighted that advice from NWTS team including conference calls with Paediatric ENT helped optimise management.

Conclusion NWTS conference calls with Paediatric ENT specialists and local team improve patient management. Paediatric ENT consultants are occasionally required with NWTS team, providing expert advice and practical help. This data will help develop new regional intubation guidelines including recognition and management of the difficult paediatric airway.

973 REGIONAL PAEDIATRIC INTENSIVE CARE (PIC) TRANSPORT SERVICES: BENEFITS OF 2 BECOMING 1!
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Background Approximately 1.7 million children North West and North Wales (UK) and 600–700 are transferred annually from 31 hospitals into 2 regional PICUs.

Prior to 2010 specialist PIC transport teams were unit based but review (2007) revealed problems:

- Minimum 30% PIC transfers by non-specialised teams (associated with adverse incidents)
- Poor access to clinical advice
- Delays finding PIC bed
- Delays mobilising specialist PIC transport team
- Adverse incidents associated with inexperienced medical personnel (specialist teams)

Regional Paediatric Transport Service (NWTS) started 2010 with a single point of contact providing advice, organisation transfer and PIC bed.

Methods Several database audits (first 12 months) to assess quality of retrievals compared to previous data.

Results 91.6% PIC transfers done by NWTS in first year (target >85%).

Retrieval times (median) Mobilisation 29.5mins (pre NWTS 80mins); stabilisation 102 mins (pre NWTS 110mins); total retrieval time 201mins (pre NWTS 310mins)

Winter data consultant present 50% (n=40) retrievals - supporting inexperienced staff.

Snapshot (6 weeks) audit showed patient management advice was substantial and potentially avert admission. For example, 13 children were initially referred, but with advice over 3 (median) phone calls (range 2–5) remained in the local centre.

Better utilisation PIC beds refusal rate 5.8% versus 37% pre-NWTS.

Satisfaction survey (referring hospitals) demonstrated overall satisfaction excellent or good in domains including comparison with previous arrangements and clinical care.

Conclusions Our data suggest that improvement in quality has occurred since the launch of NWTS, including improved utilisation of regional PICU beds.

Abstract 972 Table 1 Results

<table>
<thead>
<tr>
<th>Causes</th>
<th>Infective</th>
<th>Neonate</th>
<th>Foreign Bodies</th>
<th>Elective</th>
<th>Injury</th>
<th>Post-Tonsilllectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers</td>
<td>36</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Age</td>
<td>5 months - 9 yrs</td>
<td>5 &lt;24 hrs old (3 preterm) 8 older</td>
<td>10 months-14 yrs</td>
<td>6 days-5yrs</td>
<td>1–5 yrs</td>
<td></td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Croup, tracheitis, parapharyngeal abscess</td>
<td>Various</td>
<td>4/10 respiratory arrest</td>
<td>Tracheal stenosis, malacia, cystic hygroma</td>
<td>Trauma, caustic ingestion</td>
<td>2 with pre-op OSA</td>
</tr>
<tr>
<td>Treatment</td>
<td>Steroids, nebulised adrenaline +/- antibiotics</td>
<td>Removal in tertiary centre</td>
<td>Transferred for complex intervention</td>
<td>Steroids +/- antibiotics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intubation</td>
<td>19/36 intubated 1/36 UMA 16/36 resolved (not transferred) 1/36 LMA 16/36</td>
<td>11/13 1 transferred UMA (NWTS) 1 unable to secure airway</td>
<td>5/10</td>
<td>All endotracheal tube or tracheostomy</td>
<td>4/4</td>
<td>3/3</td>
</tr>
<tr>
<td>Paed ENT advice (Present)</td>
<td>4/36 (2)</td>
<td>13/13 (3)</td>
<td>10/10 (0)</td>
<td>8/8 (0)</td>
<td>4/4 (0)</td>
<td>3/3 (0)</td>
</tr>
</tbody>
</table>