Conclusions Varying factors are involved in timely discharge of paediatric patients. Easily implemented and widely applicable quality improvement changes are likely to play a positive role in the timely and safe discharge of paediatric inpatients.

REFERENCES

Paediatric Critical Care Society

NON-ACCIDENTAL INJURY: THINK MAJOR TRAUMA

1Helen Stewart, 2Sarah Stibbards, 3Victoria Currie. 1Sheffield Children’s Hospital NHS Foundation Trust; 2Alder Hey Children’s Hospital; 3University Hospital North Midlands

Background The 2015 North West Children’s Trauma Network Children’s Major Trauma Pathway defined the referral pathway for children who have suffered traumatic injuries in the North West. Despite this, there were concerns about several deviations from the pathway including disjointed communication and transport delays. This audit was designed to understand why this was happening and how we can improve the care of these patients.

Objectives To understand how closely the major trauma referral pathway is being followed by trauma units and local emergency hospitals in cases of traumatic injury in children.

Methods A retrospective analysis of all NWTS (North West and North Wales Transport Service) referrals from 01/06/2018 to 31/05/2019 resulted in 93 cases which met the criteria. These notes were reviewed against the defined standards with results as below.

Results

<table>
<thead>
<tr>
<th>Standard</th>
<th>Compliance</th>
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<tr>
<td>1. The trauma team leader (TTL) at the major trauma centre is involved in any call to NWTS (Children’s Major Trauma Pathway) where the presenting complaint is either initially identified or subsequently identified as being due to a traumatic injury, including non-accidental injury.</td>
<td>34% (10/29)</td>
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<tr>
<td>2. Once the referral is accepted by the TTL any time critical transfer is arranged by the local team unless agreed otherwise with the major trauma centre (Children’s Major Trauma Pathway).</td>
<td>62% (18/29)</td>
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<td>3. Safeguarding concerns are properly highlighted and documented in all cases of major trauma (Children’s Major Trauma Pathway).</td>
<td>90% (9/10)</td>
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<td>4. There were no delays to transfer caused by looking for a bed/unnecessary procedures/performing investigations unless advised by the major trauma centre (Children’s Major Trauma Pathway).</td>
<td>69% (20/29)</td>
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<td>5. The Children’s Major Trauma referral pathway was followed in all areas.</td>
<td>17% (5/29)</td>
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<td>6. All cases where a non-accidental injury is identified are reclassified as a major trauma (Children’s Major Trauma Pathway).</td>
<td>30% (3/10)</td>
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<td>7. All referrals where safeguarding concerns have been identified have the proper documentation completed and sent to the MTC (NWTS Guideline: How to deal with safeguarding)).</td>
<td>86% (59/68)</td>
</tr>
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</table>

Conclusions Action plan:
- Dissemination of the audit results throughout the transport team and children’s trauma network
- Major trauma update in outreach teaching and inhouse training
- Development of a trauma quick reference guide
- Alterations to the referral form to prompt adherence to the pathway

We were most concerned about the failure to reclassify non-accidental injuries as major trauma and conversations with colleagues elsewhere revealed similar experiences. Children who present floppy and unwell via the GP and ED, where a CT is performed and a non-accidental injury identified, are often, by this point, under the care of the general paediatricians. Outside of APLS, general paediatricians and those from other sup-specialities have very little experience in the management of traumatically injured children. They now find themselves managing a major trauma, often unaware of regional trauma pathways with additional management strategies frequently overlooked and unnecessary delays in transfer to definitive care. This has led us to develop an additional action plan to encourage education and training on the management of trauma in safeguarding updates for paediatricians.

British Paediatric Allergy Immunity and Infection Group

PAEDIATRIC QUALITY OF LIFE IN CONGENITAL CMV: CURRENT KNOWLEDGE AND FUTURE DIRECTIONS

1Kate Ralph, 1Kim Bull, 2Christine Jones. 1University of Southampton; 2University of Southampton and University Hospital Southampton NHS Foundation Trust

Background Congenital cytomegalovirus (cCMV) is the most common congenital infection. Around 25% of infants with cCMV develop permanent sequelae. However, there is a paucity of research evaluating the quality of life of children with cCMV.

Objectives This study evaluates current evidence regarding long-term effects of cCMV on affected children, and considers methodology used in quality of life studies that could be applied to cCMV and possible impacts on updated health economic evaluations of cCMV.

Methods We reviewed studies that reported long-term effects of cCMV on affected children, studies that measured quality of life in children with cCMV and similar paediatric populations, and studies that reported psychometric properties of quality of life measures.

Results The high prevalence of long-term sequelae amongst children with cCMV is likely to significantly impact quality of life of affected children and their families. Only one existing study assessed quality of life in children with cCMV and their parents, which was subject to bias and only incorporated one quality of life measure. We identified multiple quality of life measures that could be suitable for use in future studies of quality of life in cCMV, with varying psychometric properties and assessing different constructs.
Conclusions Further research evaluating quality of life in cCMV is needed. To assess quality of life in cCMV, quality of life measures should be selected based on their relevance to sequelae of cCMV (for example, inclusion of a hearing-specific measure to assess the effect of sensorineural hearing loss), but generic quality of life measures are also important for comparison to the general population. Researchers should consider the importance of spillover effects on quality of life of family members as well as effects on the child’s own quality of life. A national multi-informant cross-sectional questionnaire-based study in the UK is being undertaken, aiming to describe quality of life of children with cCMV and their families. Quality of life data could be used to inform health economic analyses and decision-making regarding cost-effectiveness of interventions for cCMV prevention and treatment.

Background Pseudomonas hot-foot syndrome is a skin infection of the soles caused by Pseudomonas aeruginosa. It is characterized by painful erythematous plantar nodules, typically occurring in children following use of Pseudomonas-contaminated pools. Similar involvement of the palms has been reported less frequently. It is clinically distinct from folliculitis caused by Pseudomonas.

Objectives To report a case of hot foot.

Methods Electronic records were used to collect data

Results A previously well 8yr old presented to his GP with history of acute onset of blanching rash on most of his torso and excruciating painful lesions on his feet. Had been jumping on the trampoline bare feet and subsequently had been in the hot tub afterwards. This was 12 hours prior to the presentation. Interestingly his 5-year-old sister had similar rash, but no feet complaints and young uncle developed both similar rash and the feet complaints as our patient. All the three were on the trampoline and in the pool.

The pain was severe in nature despite being on regular paracetamol and ibuprofen. He was unable to wear bear.

He also developed high grade fever and headache prior to presentation.

On examination: He was bright. Not systemically unwell. No mucosal involvement.

Had a cold towel on his feet to ‘ease the pain’. The rash on his torso including buttocks, was widespread, maculo-papular erythematous blanching rash. Few of them looked like white head pimples.

Both feet - widespread rash both feet, including sole margins. Red, papular, lumpy nodular, more prominent on the balls of the toes and the base of the metatarsals.

No joint involvement

The working diagnosis was Hot Foot syndrome

His bloods showed a mildly elevated CRP 29mg/L. He was initially treated with IV antibiotics and changed to oral ciprofloxacin for a duration of 10 days. He remained well during the stay

Discussion This condition typically occurs in young children. It is thought that children may have a thinner epidermis on their palms and soles compared with adults, and also that they may be more active in pool areas; this increases the risk for friction injuries and susceptibility to infection.

Symptoms typically occur 6–48 hours following exposure to contaminated pools and include intense pain followed by swelling, redness, and warmth in the affected areas. Clinical course is usually benign, with rapid resolution. The condition does not typically require antibiotic therapy; however, leukocytosis and low-grade fevers may occur with infection, and antibiotics may be given in more severe cases.

Infections typically occur as outbreaks, with history revealing use of the same contaminated pool or hot tub.

Conclusions Patients and their parents should be informed of the self-limiting nature of Pseudomonas hot-foot syndrome and its likelihood to reoccur with re-exposure to the contaminated water. Recall of the exposure source is important in order to notify other individuals who may be affected. Suspected water may also be tested for Paeruginosa; its treatment may be adjusted to obtain an optimal pH and chlorine level. Prevention may be achieved with the use of rubber pool shoe.