Background Clothing is one of the basic needs of human life. Clothing provides a proper way to cover the body with added numerous uses. With time, clothing industry has become sophisticated with increasing innovation in apparel materials and designs.

Children’s clothing is an important as well as a famous arm of current clothing industry under various categories. It has a significant impact on children’s health, safety, and well-being. These outcomes can be affected not only by the type of clothes that children wear, but also by many other factors related to child, caregiver and environment.

Different components and elements of clothing can have different impacts on children. The accessories in clothing such as cords, drawstrings, cords, belts, ties, buttons on garments can act as safety hazards on children. Several mechanisms of injury are impacted by clothing such as choking, swallowing, strangulation, entrapment, entanglement, burns, skin allergies, cut injuries, contusions, entrapments, tripping overs, falls can lead to disability or even death.

Objectives

- To assess the parental knowledge and attitudes on safety of clothing worn by their children and associated factors and to describe the factors influencing the purchase of children’s clothing
- To assess the safety of children’s clothing available at the local market, with regard to quality and contents of labelling and packaging, safety hazards safety standards in different categories of children’s clothing

Methods Two descriptive cross sectional studies. An interviewer administered questionnaire was used to gather information from parent/caretaker of every other patient admitted to paediatric wards or out patient department of Colombo South Teaching Hospital, Sri Lanka

Interviewer administered checklist which is developed according to Safety Policy of Inditex which in cooperates Global and Asian standards for children clothing and International Labelling Standards was used to collect data on 14 different clothing types. The data was collected from clothing shops located at Pamunuwa- Maharagama area, which is one of main wholesale and retail clothing markets in the country.

Results A total of 425 respondents participated in the research and 73% were females with 13% of them being house wives. 64% of clothing purchases were need based and in 76% of cases the decision for the purchase was made by parents. 90.8% Bought clothes from shops in the area and 30.7% opted for online purchases. T shirts(24%) and infant ware (19%) were most frequently bought.

Fabric type (82%), size (79%) and safety(65.5%) were the main factors which affect the decision of purchasing. The fabric preference was mostly for cotton (90.8%) and least for silk and woolen (0.2%). Choking hazards (79.4%), sharp edges & point (68.3%) and strangulation hazards (69%) were the mainly concerned aspects regarding clothing safety. 22.5% of respondents have experience clothing related injury in their children and zipper injuries (4.7%) and allergic reactions (3.8%) were the main hazards. Childhood factors (7.8%) was the main reason for accidents.

In clothing standards study shirts, T shirts and long trousers were the safest. Majority lacked safe labeling and proper packaging. Buttons were the most unsafe accessory.

Conclusions It is evident from our analysis that the clothing accessible to children of middle to low income families do not adhere to expected safety standards which expose them to numerous hazards. Therefore new clothing standards should be laid and existing standards should be reinforced.

Our parents and care takers were knowledgeable in many aspects of clothing safety, yet there is place for improvement and they are ready for it.

Paediatric Critical Care Society

1586 DIFFUSE ALVEOLAR HEMORRHAGE IN CHILDREN WITH DENGUE FEVER: AN OBSERVATIONAL STUDY

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Background Dengue fever is an arthropod-borne viral disease commonly encountered in many tropical countries. The spectrum of the disease varies widely, and at times, it may present with unusual complications. One such dreaded but rare complication is, diffuse alveolar hemorrhage (DAH). It is usually regarded as a terminal event that occurs after refractory shock and associated with high mortality.

Objectives We aim to evaluate the incidence, clinical features and outcome of children presenting with DAH associated with Dengue fever.

Methods All children admitted with a diagnosis of dengue fever in the past three years (2018–2020) in our hospital were included in the study. Confirmation of diagnosis was done by a serological assay detecting NS1 antigen or Dengue IgM antibody. All children are managed according to the WHO (World Health Organization) Dengue management guidelines.

Results Total 250 children were diagnosed with Dengue Fever during the study period. Among them, six (2.4%) children were diagnosed with DAH. All of them had low platelet counts and three (50%) of them had coagulopathy as shown in table 1. Two (33%) of them had no features of shock while in three children, shock had responded to treatment (Fluids and inotropes) prior to the onset of DAH. Only one child had catecholamine refractory shock before the onset of DAH. One (17%) child had hemophagocytic lymphohistiocytosis (HLH). Three (50%) children with DAH succumbed to the disease. Children who survived, received supportive care with blood products transfusion, mechanical ventilation (MV) with high PEEP.

Abstract 1586 Table 1

<table>
<thead>
<tr>
<th>Case</th>
<th>Duration of illness at onset of DAH</th>
<th>Platelet count (Cells/mm3)</th>
<th>Coagulopathy</th>
<th>Shock</th>
<th>HLH</th>
<th>Outcome</th>
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<td>No</td>
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</tr>
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<td>7000</td>
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<tr>
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<td>Yes</td>
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</tr>
<tr>
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</tr>
<tr>
<td>6</td>
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<td>11000</td>
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<td>Yes</td>
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</tbody>
</table>
Conclusions DAH is an uncommon, life-threatening complication of dengue Fever. A high index of suspicion and early institution of supportive treatment in form of blood component transfusion, shock management and mechanical ventilation are critical to successful management of such patients.

British Association of Paediatricians in Audiology

AUDILOGICAL COMPLICATIONS OF MENINGITIS IN CHILDREN

Background Bacterial meningitis is the commonest cause of acquired deafness (Fortnum, 1992) resulting in permanent sensorineural hearing loss (SNHL). Therefore, early audiological assessment is essential (Rahko et al, 1984).

Currently, Streptococcus pneumoniae and Neisseria meningitidis are the most common organisms responsible for bacterial meningitis (Kutz et al, 2006). Labyrinthine ossification, a significant and rapid otological emergency, is more common after infection with Streptococcus pneumoniae (Douglas et al, 2008).

Objectives The primary objective was to determine the post-meningitis auditory complications.

The secondary objectives were to determine the pathogen, neuro-radiological changes and to ascertain the relationship with the auditory deficit.

Methods This was a retrospective case-note audit of children who had at least 1 audiological assessment in a tertiary children’s hospital in UK following referral to the Audiovestibular Department with suspected or confirmed meningitis and/or sepsis. Referrals made within 24-months (1st January 2018 to 31st December 2019) were considered. Patients that did not have an audiological assessment (e.g. child returned home and out of catchment area) were excluded. The audiological results (degree, type and laterality of deafness), microbiological details, radiological changes and audiological intervention were recorded.

Results During the 24-months, 44 children had at least 1 audiological assessment following suspected or confirmed meningitis and/or sepsis. The majority were in-patient ward referrals (n=38, 86%) and others were from various referral sources (General Paediatric clinic, Newborn Hearing Screening Programme, Speech Therapist and Health Visitor). The age on admission ranged from 2days (2 children) to 16 years. 9 (20%) babies were <1 month old and 27 (61%) were male.

As per British Society of Audiology guidelines, 39 children (89%) had satisfactory hearing on soundfield or ear-specific tests. 2 children had bilateral severe-to-profound SNHL. Further 2 had unilateral SNHL. One had unilateral conductive hearing loss due to underlying otitis media with effusion. The other had Streptococcus parasanguinis and intracranial fluid collections over the left cerebellar hemisphere and right frontal lobe. They both eventually underwent cochlear implantation for hearing rehabilitation.

The microbiological profile of the cohort included Neisseria meningitides (including the above child) (n=15, 34%), Enterovirus (n=8, 18%), Streptococcus agalactiae (n=6, 14%), Streptococcus pneumoniae and E. coli (4 each), culture negative but neutrophilia in cerebrospinal fluid samples (n=3) and 1 each with Haemophilus influenzae, Streptococcus parasanguinis (above bilateral SNHL), Streptococcus gallolyticus and unknown organism.

Post-meningitis neuro-radiological changes were noted in about 30% of children. These included bilateral labyrinthine ossification (n=1, above child), non-cystic focal lesions (n=5), significant intracranial fluid collections (including hydrocephalus) (n=4), subdural effusions (n=2) and gliosis (n=1).

Conclusions The most prevalent organism in our cohort was Neisseria meningitides and 1 child had significant rapid cochlear ossification needing urgent cochlear implantation. Pneumococcal meningitis can result in unilateral SNHL (2 children), 30% of children had labyrinthine and intra-cranial radiological changes.

Therefore, it is vital to consider the micro-organism, radiological findings and correlate these with the audiological findings to ascertain the audiological risk and prognosis after meningitis in children.

British Association for Paediatric Nephrology

URINARY ASCITES IN CHILDREN

Background Urinary ascites (UA) is rare in children. There can be several reasons for urine leakage to peritoneum such as spontaneous rupture of bladder, a complication from surgery or trauma, and prematurity, especially in neonates. We report two cases of urinary ascites in an 11 months old and a 5 years old, with different pathologies.

Methods Case Report 1: A 11m old boy with Menke’s disease presented with mild cellulitis was treated with antibiotics. He developed vomiting on the day of discharge and he was observed for 24hrs. He developed acute abdominal distention with signs of shock. His bloods revealed acute kidney injury. His abdominal imaging revealed extensive ascites. He was treated with fluid boluses and transferred to PICU. He had abdominal paracentesis which drained 400ml of clear fluid. The biochemical analysis confirmed it was urine. He had diverticulum of bladder.

Case Report 2: A 5yr old boy had appendectomy. He was observed for persisting abdominal pain following surgery. His blood revealed acute kidney injury. He had MCUG which revealed bladder leakage into peritoneum. His bladder was decompressed with catheterisation.

Results In these cases, the abnormal renal function was caused by fluids and electrolytes equilibrating across peritoneal surface, as occurs in peritoneal dialysis. In both cases the pseudo-azotaemia resolved in 24hrs with bladder decompression.