Mean time to triage for those who arrived by ambulance was 10:03 (mm:ss) with a maximum wait of 36:00. In comparison, those attending by other transport methods had a mean time to triage of 10:18, with a maximum wait time of 57:00. The total number of patients was significantly smaller than the previous year ruling out direct statistical comparison.

29 (15.8%) patients were brought by ambulance and subsequently triaged as category 4 or 5. None of these patients deteriorated.

Conclusions Arrival by ambulance does not always equate to acuity of presentation. The pilot demonstrated that the flow-chart is safe in paediatrics with a robust list of red flags. With the national PEWS incorporated we can safely identify low acuity patients. The next pilot introduces a 3rd arm identifying low acuity patients with normal PEWS who do not require a verbal handover. This has the potential to impact on ambulance turnaround time and improve space within the socially distanced waiting room.

Child Protection Special Interest Group

697 CHAPERONES IN PAEDIATRICS – ARE WE THINKING ABOUT IT?

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Background Since the 2004 Ayling report (1), the offer of formal chaperone during intimate examinations has been mandated in health care settings and reflected in the GMC guidance (2). The use of Chaperone Policies across NHS Trusts has considerable variability (3 4) and in practice adherence with chaperone policies is often poor (5). Within paediatrics there may be confusion about whether the presence of caregivers negates the need to offer a formal chaperone, further compounded by the absence of clearly defined age limits.

Objectives The aim of the project was to evaluate compliance with the Trust formal chaperone policy within a tertiary paediatric hospital and to then develop strategies to improve performance.

Methods The Trust chaperone policy applies to all children and young people (CYP) under 18 years of age. The audit was conducted within the children's emergency department (CED) and children's outpatient department (COPD). Criteria for offer of a formal chaperone included unaccompanied CYP, intimate examinations (including upper torso examinations of female patients) and CYP or parents/carers with a history of difficult or unpredictable behaviour.

A prospective analysis of notes for CYP meeting the eligibility criteria was undertaken for paediatric CED attendances over a 7- day period and COPD attendances over a 2-day period in July 2019.

Data collected included:

- type of examination;
- documentation of formal chaperone offer (even if declined);
- name and designation of formal chaperone;
- gender (or gender identity) of formal chaperone and patient.

Results Of 567 attendances in paediatric ED and 118 COPD clinic attendances, 66 met eligibility criteria (9.6% of all attendances). Of these 6% were unaccompanied CYP and 94% underwent an intimate examination.

Only 10% of eligible patients in the paediatric ED and 8% in paediatric outpatients respectively had documented a formal chaperone. When a formal chaperone was documented there was >80% compliance with documentation of their name and designation and with being of the same gender/gender identity as the CYP.

Following the analysis, it was clear there were gaps in staff awareness of the policy and inconsistent documentation. A plan-do-study-act quality improvement method was used and the following interventions were implemented between November -December 2020:

- A chaperone poster was developed with staff and patient feedback and displayed in all clinical areas;
- A quick reference guide to the trust chaperone policy was created and disseminated to trainees at induction;
- An educational training video was created and presented to the consultant body and in the departmental trainee teaching;
- A chaperone sticker was introduced to be used in medical notes in paediatric ED and Outpatient departments to improve documentation.

Post-intervention evaluation is ongoing.

Conclusions The use of formal chaperone in the paediatric setting is increasingly important as a means to safeguard both young patients and the staff involved in their care. Compliance with Trust Chaperone policy in a busy Paediatric hospital was poor and highlighted gaps in staff awareness and inadequate documentation. A quality improvement approach may help to improve compliance in this challenging area of paediatrics.

British Society of Paediatric Endocrinology and Diabetes

698 THYROID DYSGENESIS IS NOT A COMMON AETIOLOGY FOR CONGENITAL HYPOTHYROIDISM

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Background Congenital hypothyroidism (CH) is one of the commonest endocrine problems in infancy. It is also the most treatable cause of mental retardation worldwide. In Hong Kong (HK), CH is screened by cord blood assay of thyroid function undertaken by the Clinical Genetic Service (CGS). Most neonates and infants with abnormal thyroid functions are referred to their birthing hospitals for further investigations and treatment if necessary.

Conventionally the subtypes of CH are identified by thyroid scintigraphy. It has been considered thyroid dysgenesis (TD) comprises the majority of cases of CH, with prevalence up to 85%, with the remaining best described as gland-in-situ (GIS), of which less than 50% is due to thyroid dysmorphogenesis (TH). However, this observation has been challenged recently, which may carry a prognostic implication on the need of lifelong thyroxine replacement.

Objectives We hereby report the prevalence of different causes of CH in Princess Margaret Hospital, a paediatric endocrinology center in HK, and compare to the data reported in the literature.

Methods In PMH, all thyroid scintigraphy for the assessment of congenital hypothyroidism was performed with Tc-99m pertechnetate. Clinical data from neonates and infants who attended for thyroid scintigraphy over 10 years' period from 1 January 2008 to 31 December 2017 inclusively was gathered: demographics, biochemical parameters, thyroid scintigraphy results, associated complications including developmental delay, and permanence of CH as assessed at the age of 3 years. Scintigraphy was classified as gland-in-situ (GIS), ectopic, agenesis and reduced tracer uptake. Data from all patients referred from CGS for assessment of suspected CH were also collected, including patients who were replaced with thyroxine without thyroid scintigraphy performed.

Positive CH screen is defined when patients required thyroxine replacement, usually during infancy period. Permanent CH refers to patients who required ongoing thyroxine treatment from age 3 onwards. Transient CH is classified if thyroxine was discontinued following a trial off treatment.

Results The retrospective cohort study included 89 patients who had thyroid scintigraphy done within the study period. 68 of them (34 boys, 50%) had positive CH screen, of which a vast majority (66 patients, 97%) of patients were of Chinese ethnicity. One patient had parental consanguinity.

Thyroid scintigraphy displays the following subgroups: GIS (n=53, 78%), absent (n=2, 3%), reduced tracer uptake (n=6, 10%) and ectopic (n=7, 12%). Of the 53 patients with GIS by thyroid scintigraphy, permanence of CH is evident in 19 patients (36%).

32 (47%) of them were classified as permanent CH when they required recommencement of thyroxine following a trial off treatment or when their treating endocrinologists decided that continuation of therapy was deemed necessary.

Of all patients classified as permanent CH, there are 19 (59%) GIS, 8 (25%) thyroid dysgenesis, i.e., 1 (3%) thyroid agenesis and 7 (22%) ectopic thyroid, and 5 (16%) scintigraphs with reduced tracer uptake.

Conclusions Instead of thyroid dysgenesis, our data suggests that GIS is the main subtype of CH taking into consideration of all positive CH screens or permanent CH. Less than 30% is permanent CH in those with GIS.

British Association of Perinatal Medicine and Neonatal Society

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HOW LOW IS TOO LOW? DETERMINING THE INCIDENCE OF SYMPTOMATIC NEONATAL HYPONATRAEMIA SECONDARY TO MATERNAL PERIPARTUM HYPONATRAEMIA- AN UNSOLVED PROBLEM

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Background In Northern Ireland the Guidelines and Audit implementation network produced guidance in 2017 advising that paediatricians should be informed when infants are born to mothers with a peripartum serum sodium ≤ 129 mmol/L. However, there is no current guidance on management of these infants. Regional practice is variable with infant sodium checked between 12–24 hours old, or not at all.

A literature review found 9 case reports of neonatal seizures secondary to isolated maternal hyponatraemia. All

occurred within 6 hours of delivery, with maternal sodium range 107–124mmol/L, and neonatal sodium range 108–126mmol/L.

Objectives Firstly, to ascertain the incidence of neonatal hyponatraemia secondary to maternal peripartum hyponatraemia through a regional audit. Secondly to determine the incidence of neonatal seizures secondary to hyponatraemia and thereby gain insight into the serum sodium, (both maternal and neonatal,) that requires observation and/or intervention in order to reduce NICU admissions and adverse outcomes for infants.

Methods In two neonatal units we used retrospective case analysis to review the data of infants >35 weeks' gestation born to mothers with Sodium ≤ 129 mmol/L (18hrs pre delivery, until 8hrs post-partum.) From March 2018- March 2020 96 cases were identified in the tertiary neonatal unit and from May 2020-November 2020 10 cases were identified in a district general unit. Data was collected for each infant including symptoms of hyponatraemia, clinical features, investigations, results and management.

Results A total of 106 cases of maternal peripartum hyponatraemia ≤ 129 mmol/L were identified. In 45 of these cases, infant serum sodium was checked. 10 had serum sodium ≤ 129 mmol. 11 infants were treated for hyponatraemia; 10 (Na 123–131mmol/L) received oral supplementation and 4 (Na 123–129mmol/L) were admitted to NICU and received intravenous fluids. 2 of these cases presented clinically (prior to blood sampling) with hyponatraemic seizures with no other cause identified. Both were ≤ 8 hrs of life with maternal sodium of 123mmol/L and 127mmol/L. Standard investigations (including lumbar puncture and MRI brain) to consider other causes for symptoms, were performed and seizures treated with anticonvulsants; both infants recovered well.

Conclusions Neonatal hyponatraemia secondary to maternal hyponatraemia does occur and can cause neonatal seizures. However, these events are rare, occur early (<12hours) and are associated with a very low maternal sodium. These infants would not be identified by current practice of testing at 12–24 hours of life. We have used our data as part of a quality improvement project to develop a guideline identifying infants at risk of symptomatic hyponatraemia whilst reducing unnecessary investigations in asymptomatic, low risk infants of mother's with mild hyponatraemia. This guideline is currently being trialled with plans to review and implement regionally.

Association of Paediatric Emergency Medicine

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PREHOSPITAL PAEDIATRIC BURN CARE: A RE-AUDIT. THE ADEQUACY OF COOL RUNNING WATER FIRST AID

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Background Appropriate initial management of paediatric thermal burns is key to the prevention of complications and improvement in patient outcomes. Interestingly, research revealed significantly poorer knowledge of burns first aid (FA) management among healthcare workers, when compared with non-healthcare workers. Guidelines recommend all patients receive twenty minutes of cool running water up to three