Methods In PMH, all thyroid scintigraphy for the assessment of congenital hypothyroidism was performed with Tc-99m per technetate. 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.

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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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10.1136/archdischild-2021-rcpch.150

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.

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

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10.1136/archdischild-2021-rcpch.151

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