Methods A web-based questionnaire survey was sent out to junior paediatric doctors, Advanced Neonatal Nurse Practitioners (ANNP) and consultants to determine their experience and understanding of Difficult Airway Management in Neonatal medicine clinical practice. Also assessed was their confidence level on a 1 to 5 scale on neonatal intubation. The responses were analyzed using Excel.

Results 83 responses were received which were constituted by 17% (14) Senior House Officers, 55.4% (46) Registrars, 18% (15) Consultants and 9.6% (8) ANNP. Those in run through training program were ST1–3 (11), ST4–5(21) and ST6–8 (20).

Highest neonatal hospital experience was gained in Tertiary hospital Neonatal unit by 54%(45),in District General Hospital with level 3 neonatal unit by 30% (25), level 2 by 10.8%(9) and the rest in level 1 unit.

Previous Neonatal Experience: 33.7% (28) more than 5 y experience, 3–5y experience in 14.4% (12), 31.3% (26) had 1–3 yrs, 6 mo–12 mo by 9.6% (8), 3–6 month experience in 8.4% (7). 3.6% (3) were working for the first time in NICU.

Confidence Level on Neonatal Intubation: 47% (39) reported to be very or extremely confident. 31% (26) were somewhat confident and 22% (18) were not so or not at all confident.

Nearly half (46%) were not aware of any DAM guidelines, Only 7% (6)were aware of both National and Local Guidelines. 20% (17) knew about National guidelines and 26%(22) were aware of local guidelines. Overall only 10 (21.7%) Registrars and 3 (37.5%) ANNP'S were aware of National Guidelines.

Training on DAM: 44.5% (37) had never received any training and were interested to attend training course, 24% (20) had received between 1–3 y and 12% (10) had >3y ago. Out of 45 registrars overall, 21 (47%) have never had a training session.

Difficult airway was reported to be encountered by 53% (44) and 5% (4) did not know what is meant by Difficult Airway.

Use of airway adjuncts- Supraglottic Airway Device (SAD) and Video Laryngoscope (VL): both not used by 36% (30),10.8% (9)had experience using both only 6% (5) had used SAD, only 29% (24) reported to have used VL, 16% had used each of them in simulation.

Conclusions There seems to be a wide variation in the knowledge and skills of DAM among neonatal clinicians.Only half of the clinicians who took part in the survey seemed to been aware of any DAM guidelines, only a minority seem to have received formal training in this scenario. We intend to address this locally and regionally by robust training and guidelines by working with the deanery and integrated care systems.

Paediatric Special Interest Group: British Society of Haematology

798 BONE MINERAL DENSITY AND CALCIUM STATUS IN CHILDREN WITH B-THALASSEMIA

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10.1136/archdischild-2021-rcpch.205

Background Bone disease in thalassemia in the form of low bone mass remains a frequent, debilitating and poorly

understood problem, even among well transfused and chelated patients. Frequent blood transfusion has increased the life expectancy of patients with β -thalassemia major, but it causes progressive iron overload. Iron deposits saturate transferrin in the reticuloendothelial system; enter the parenchyma, causing important oxidative damage, mostly to the heart, liver and endocrine glands.

Objectives In this work we attempted to delineate calcium status and bone mineral density in a group of transfusion dependent β -thalassemic patients of both sexes.

Methods In This cross sectional study we attempted to assess Bone Mineral Density (BMD) in 50 thalassemic patients (39 major and 11 intermedia), aged 5–18 years of both sexes on regular blood transfusion and adjusted iron chelation therapy recruited from the Hematology department at a tertiary hospital. Egypt,as well as, fifteen children taken as a control group, by usage of Dual Energy X Ray Absorptiometry technique (DEXA) for Bone Mineral Density (BMD) of total body and lumbar spine. The effects of age, sex, consanguinity, transfusion/chelation program as well as hemoglobin, serum calcium, phosphorus, alkaline phosphatase on BMD were also evaluated.

Results Out of our 50 studied thalassemic patients, 9 patients (18%) had normal BMD (Z score >-1), 41 patients (82%) had low both total and lumbar BMD. Patients showed lower BMD of total body and lumbar region, Z-score is (-1.5 ± 1.2), (-2.4 ± 1.7) respectively in comparison with age and sex matched normal control (-0.2 ± 0.9), (-0.1 ± 1). Both parameters are correlated significantly with age of the patients, duration of transfusion and chelating therapy, serum alkaline phosphatase, Mean Height and Weight Z score. Total BMD was correlated significantly with serum calcium and phosphorus while other clinical, biochemical and hematological parameters did not influence BMD values.

Conclusions Bone mineral density is a good index of bone status in patients with Thalassemia and should be done annually. To optimize BMD in Thalassemic patients, it is important to ensure adequate iron chelation and adequate intake of calcium and vitamin D. Close follow-up and early recognition of osteopenia as well as proper management are crucial for every thalassemic patient giving him/her the right to live a better life. We recommend early routine BMD screening before puberty, which is proposed to be a sensitive predictor for early bone changes, in particularly at the lumbar spine. Osteopenia and osteoporosis should be assessed annually via DXA scan. Bone pain and fractures should be an emphasis. Further studies on a wider scale are required to fully clarify the precise environmental and genetic mechanisms underlying bone metabolism derangement in thalassemic children.

British Association of Perinatal Medicine and Neonatal Society

800 FEASIBILITY OF THERAPEUTIC HYPOTHERMIA IN NEONATES WITH PERINATAL ASPHYXIA USING LOW COST DEVICE IN DEVELOPING COUNTRIES AND TO EVALUATE THE OUTCOMES

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10.1136/archdischild-2021-rcpch.206