intrauterine fibroids, myomas or the foetal limbs could result in deformation.

In the case described the history of oligohydramnios may have contributed to skull depression by bringing the foetal skull into contact with the solid structures within the maternal pelvis.

Proposed treatments for congenital SD include conservative management, surgical and non-surgical interventions. The majority of skull depressions resolve spontaneously, therefore as in this case, in the absence of neurological symptoms a conservative approach of a six-month observation period is recommended.

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HOME OXYGEN REFERRAL IN PREMATURE NEONATES BORN IN UMHL OVER TWO YEARS PERIOD

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10.1136/archdischild-2019-epa.819

Background Bronchopulmonary dysplasia(BPD) has been a challenging condition for neonatologists(1). Prematurely born infants who had BPD may require supplementary oxygen at home for many months(2).

Objectives To determine the number of premature babies discharged on home oxygen over two years period in UMHL and to confirm about average gestation age at which babies were self ventilating in air.

Methodology Retrospective data of 38 babies equal to or less than 29 weeks of gestation was collected, born in UMHL from February 2016 to February 2018. Different variables were studied including Gestation at birth, Birth weight, Date of admission, Date of discharge, Gestation for self ventilation in air, Gestation of home oxygen referral and gestation at discharge. Management of Chronic Lung Disease in the form of steroids, diuretics, patent ductus arteriosus(PDA) treatment and number of blood transfusions were also looked upon.

Results Total 38 babies born in UMHL from February 2016 to February 2018, equal to or less than 29 weeks of gestation. 26%(n=10) babies were excluded from the study including 21%(n=8) babies died, 3%(n=1) chart missing and 3%(n=1) baby lost follow up. 71%(n=20) were born in the gestation range of 26 to 28 weeks and 70%(n=19) were between birth weight of 750 grams to 1250 grams. 59%(n=16) babies were self ventilating in air between 31 to 35 weeks of gestation compared to 11%(n=3) who took over 41 weeks of corrected gestational age. 4%(n=1) babies were not able to wean off from oxygen over two years period. 29%(n=8) of the babies didn't need any intervention (Diuretics, Steroids, PDA management, Blood transfusion) during their stay in NICU while 29%(n=8) needed just one intervention. 43%(n=12) of the babies needed two or more interventions to achieve self ventilation in air.

Conclusion Only one baby out of total 28 was discharged on home oxygen over two years period and most of the babies were able to achieve self ventilation in air between 31st to 35th weeks of gestation.

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THE USE OF MASSAGE THERAPY FOR TREATMENT OF NEONATAL HYPERBILIRUBINEMIA : A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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10.1136/archdischild-2019-epa.820

Background Neonatal jaundice is a common health problem which is expected to be seen in 60–80% of healthy newborns, with 10% occurrence of hyperbilirubinemia in neonates during first week of life. Massage therapy has been practiced for centuries to gain health benefits in infants. We aimed to evaluate effectiveness of various types of infant massage in reduction of neonatal jaundice and the need for phototherapy (PT).

Methods On 26 March 2016, we conducted electronic search term in nine databases, with inclusion of randomized controlled trials (RCTs) that investigated newborn babies receiving massage therapy with documented total bilirubin before and after the treatment. Study protocol was registered on PROSPERO, CRD42016049025. Quality assessment was performed using Cochrane risk of bias tool. Frequentist network meta-analysis (NMA) and meta-analysis (MA) were used to compare all outcomes by each day of follow-up.

Results With 363 studies initially identified, 32 were eligible for qualitative analysis and 29 for quantitative analysis. For neonates requiring PT, our NMA results showed that in 3rd day of life, massage and phototherapy (MP) was significantly the most effective in reduction of serum bilirubin level, while acupressure massage and phototherapy (AMP) was the least compared to by phototherapy only (P), with MD, 95%CI (-1.16 [-1.61; -0.72], 1.28 [0.79; 1.77] respectively). In 14th day of life, bilirubin level decreased the most in massage with enema and phototherapy (MEP), while MP has no significant difference compared to P. Our MA results in 4th day of life, indicated that MP had a significant decrease in bilirubin level compared with P, with MD 95%CI (-2.23 [-3.43; -1.03]). In summary comparison with P, MP was the most in decreasing bilirubin level in most of days, with the biggest decrease being in 4th day, while MEP was significantly the most in 14th day. For neonates not requiring PT, our NMA showed a significant decrease in bilirubin level with massage and bathing, acupressure massage, and massage 3–4 times/days (M2) groups in 3rd day of life, and with massage 1–2 times/days (M1) and M2 groups in 4th day. MEP group had a significantly longer duration of PT compared with P, with MD 95%CI (29.09 [9.76;

48.41)). M1 and M2 did not have a significant effect on the requirement for PT.

Conclusion Massage therapy could be an effective adjuvant to PT in order to reduce the PT duration. However, it did not reduce the requirement for PT.

P485 ANNULAR SKIN LESIONS IN A NEONATE – *TRICHOPHYTON SOUDANENSE*

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10.1136/archdischild-2019-epa.821

Background Cutaneous fungal infections in healthy neonates are a very rare occurrence. We report a case of a previously well seventeen-day-old neonate presenting with a five-day history of multiple annular skin lesions. These were located on the neck, groin and scalp. Microbiological culture of skin scrapings confirmed the presence of *trichophyton soudanense*. *Trichophyton soudanense* is an anthropophilic dermatophyte endemic to sub-Saharan Africa, however it is now recognised as an emerging cause of dermatophytoses in the Western world - in our case Tinea Capitis and Tinea Corporis.

Case Summary A seventeen-day-old neonate presented to our paediatric outpatient department with an annular skin rash. Five days previously lesions had been noted on the scalp and over subsequent days similar lesions appeared on the neck and groin. There were no associated symptoms and the baby was afebrile and had been feeding well. The patient's mother was an African lady from Sierra Leone who had traveled to Ireland while pregnant at 35 weeks gestation. The baby was born at 40 weeks gestation via spontaneous vaginal delivery. The mother developed intra-partum pyrexia, investigations for sepsis were performed and she was commenced on intravenous antibiotics. The high vaginal swab was positive for Group B streptococcus and maternal CRP was 105 mg/L. In light of the maternal history had a workup for sepsis performed and was commenced on intravenous antibiotics. Investigations were negative, antibiotics were discontinued and the baby was clinically well on discharge from the hospital. On routine attendance at POPD five days post delivery, the baby was clinically well with no evident skin lesions.

The patient was referred to the POPD from his primary care provider. An annular rash was noted at the base of the neck, measuring 1.5 cm in diameter with central clearing. Similar lesions were noted on the scalp – which had associated circumferential pustular lesions, and in the groin – which had an erythematous base. Skin scrapings were sent for microbiological investigation.

The skin scraping was incubated on potato dextrose and dermasel agar at 30° C. At five days isolates were identified based on distinctive colony morphology i.e. fluffy yellow colour growth and microscopic features as *Trichophyton soudanense*.

Follow up Skin rash disappeared in ten days with residual hyperpigmentation which is typically seen in *Trichophyton* infections.

Conclusion Though extremely rare, ringworm or tinea infection should be considered as differential diagnosis while dealing with annular lesions

P486 AUDIT OF PROPHYLACTIC VITAMIN K DOCUMENTATION IN UNIVERSITY MATERNITY HOSPITAL LIMERICK

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10.1136/archdischild-2019-epa.822

Background Phytomenadione (Vitamin K1) is given at birth to all neonates for the prevention of Vitamin K Deficiency Bleeding (VKDB) because there is decline in vitamin k after birth. Reasons for decline are lack of intestinal bacteria required to synthesize vitamin K, quick depletion in stores after birth, poor vitamin k transfer across placenta and low vitamin k concentration in breast milk.

Objectives To evaluate adherence to the policy for administration of Phytomenadione (Vitamin k) to Neonates and documentation of prophylactic vitamin k, in UMHL.

Methodology This is a Prospective study, conducted in University Maternity Hospital Limerick, Limerick, Ireland, in postnatal wards and Neonatal Intensive Care Unit (NICU), during the period from 01/08/2017 to 31/08/2017 with exclusion criteria of not including babies born outside hospital

Results Total of 50 patients Healthcare records were assessed, 32 in postnatal wards and 18 in NICU. 48(96%) have documented evidence of vitamin K injection. 48 (96%) mothers consented for vitamin k administration; in 29(60%) there was evidence of verbal consent compared to 19 with no evidence of consent. On PNW in 90% prescription date, dose and route were mentioned and 40% parents received information leaflets. In NICU there was 100% documentation of date, dose and route of administration while no parents were given information leaflets.

Conclusion There was a good compliance to the audited policy, in term of number of patients who received vit k but there was a significant deficiency in documentation practice and information giving to parents.

P487 CHANGING PATTERNS IN PRESSOR SUPPORT IN THE NEONATAL INTENSIVE CARE UNIT. A TEN-YEAR OVERVIEW

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10.1136/archdischild-2019-epa.823

Background & Aims Haemodynamic instability is a problem frequently encountered in Neonatal Intensive Care. It is a relatively common complication of preterm birth. In term neonates, it is often associated with significant disease processes such as pulmonary hypertension and sepsis. Infants with low blood pressure are usually treated with fluids, inotropes and occasionally steroids, in cases of refractory hypotension. The