Results Eighty-eight cases were identified which represents 9.6% of total hospitalizations during the study period. The sex ratio was 1.4. Fifty four percent (n=48) of cases were associated to bacteraemia and only 2 cases of meningitis were noted. Infectious risk factors were acute fetal hypoxia (42%), peripartum maternal fever (35.2%) and membrane rupture more than 12 hours before delivery (26.1%). Sixteen percent of all newborns were premature and 19.3% had a low birth weight. 64.8% were symptomatic at birth. The main clinical signs were respiratory distress (82.5%), neurologic distress (17.5%) and fever (12.3%).

Assisted ventilation was required in 11 patients, 5 of whom died. Predictive factors for bad prognosis were prematurity (2case), severe hypoxemia (2case), nosocomial infections (1case).

Conclusions We noted a decrease in the mortality rate, due to advances in the neonatal care. However, neonatal streptococcal B infections still remain a significant problem of public health requiring additional preventive and therapeutic management based on systematic screening and antibiotic prophylaxis.

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SUCCESSFUL EXTUBATION IN VERY LOW BIRTH WEIGHT INFANTS IN A TERTIARY NEONATAL INTENSIVE CARE UNIT

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Introduction Prompt extubation of mechanically ventilated very low birth weight infants (VLBW) in the NICU, when clinically ready is in infants' best interest. It can be difficult to predict which infants will extubate successfully. No one bedside test or clinical sign has proven useful as a predictive tool. Reported rates of extubation failure in preterm infants are as high as 50%. At our level 3 NICU the decision to extubate an infant is at the discretion of the clinical team; there are no set extubation criteria. We aimed to determine the rate of successful extubation at our hospital; and to describe any clinical markers associated with extubation success or failure.

Methods This retrospective review was carried out at the National Maternity Hospital, between January 1st and December 31st 2017. VLBW infants with a birth weight (BW) ≤1500 g, that were mechanically ventilated and had a planned extubation attempt during their admission were included. For each individual we included data from the first extubation attempt only.

Results Of the 146 infants ≤1500 g admitted to the NICU, 56 (38%) were intubated and 48(33%) had a planned extubation attempt. The mean (SD) gestational (GA) of the 48 included infants was 28(2) weeks, BW 1097(261)g. Extubation was successful in 82% of infants and was associated with higher GA and BW, and shorter duration of ventilation. At re-intubation, 80% of infants had an additional co-morbidity.

Abstract P454 Table 1

Characteristics	Successful N = 40	Unsuccessful N = 8	P Value
GA, wks ^a	28 (2)	25 (1)	<0.001
BW, g ^a	1123 (241)	807 (204)	0.002
Inborn ^b	36 (90)	6 (75)	0.258
Male ^b	16 (40)	5 (62)	0.272
Delayed cord clamping ≥30 seconds ^b	31 (81)*	4 (57)*	0.172
SVD	16 (40)	6 (75)	0.077
Duration of mechanical ventilation, hours ^c	42 (19–147)	132 (70–169)	0.026
Surfactant (ETT) ^b	38 (95)	8 (100)	0.990
Caffeine	40 (100)	8 (100)	
Postnatal steroids ^b	16 (40)	6 (75)	0.077
FiO ₂ pre-extubation ^a	0.23 (0.03)	0.27 (0.06)	0.069

^aMean (SD), ^bN (%), ^cMedian (IQR); *Missing data

Conclusion The rate of extubation success at our NICU is higher than previously reported. There are multiple potential reasons for this including tertiary antenatal care, few outborn infants, completed courses of ANS, postnatal steroid use; or a conservative approach to extubation. A higher GA and BW, and shorter duration of mechanical ventilation were associated with extubation success.

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A RETROSPECTIVE AUDIT LOOKING AT HAEMATOLOGICAL ABNORMALITIES IN CHILDREN BORN WITH DOWN SYNDROME IN A TERTIARY MATERNITY HOSPITAL

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Background Haematological abnormalities are common in children with Down Syndrome (T21). In the neonatal period, babies can present with polycythemia, neutrophilia and thrombocytopenia. There is also a 150-fold increased risk of myeloid-leukaemia of Down Syndrome usually presenting before five years¹. This is seen by a transient abnormal myelopoiesis (TAM), unique to T21, and associated with the haematopoietic transcription factor gene GATA1¹. There are increased blast cells (>10%) however, silent presentations do still occur with infants developing ML-DS with <10% blast cells on film¹.

Aim In this audit, we aimed to examine the haematological abnormalities of babies with T21 born in our centre. Our guidelines state that all children with a suspected diagnosis of T21 should have a full blood count (FBC) carried out in the first few days of life. If there are abnormalities, a blood film is carried out as routine and patients with significant abnormalities are discussed directly with a haematology consultant for further management.

Methods A retrospective lab audit in a tertiary maternity hospital of all 42 babies diagnosed with T21 over a two-year

period. Timing of first full blood count, frequency of repeat full blood counts and the lab values were documented.

Results 42 babies with T21 were born from 2016–2018; 41 babies had a FBC within 5 days (see table 1).

Abstract P455 Table 1

Hb	WCC	Platelets
21.1 (16.9–25.8)	15.7 (9.3–24)	140 (34–271)

1/42 babies warranted an automatic referral to a tertiary haematologist because of significantly elevated blast cells on film (13%). Five other babies had evidence of blasts cells of 5% or less on their initial FBC with three of these babies having resolution of the blast cells to 0%. One baby was due follow up in a regional centre and one did not have a repeat FBC.

Conclusion The association of T21 with acute leukaemia is well documented. In keeping with international guidelines, our policy is to carry out a full blood count on all babies born with T21. We see that our incidence is less than the 10–15% reported case load of TAM¹ with only 1 baby reaching the criteria. This disorder develops over the first five years of life; meaning it is essential these children get annual blood tests for monitoring through their community paediatrician.

REFERENCE

1. Bhatnagar N, Nizery L, Tunstall O, Vyas P, Roberts I Transient abnormal myelopoiesis and AML in Down syndrome: an update. *Current hematologic malignancy reports* 2016 Oct 1;11(5):333–41.

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MANAGEMENT OF CYSTIC LYMPHANGIOMAS IN THE NEWBORN: A STUDY OF 6 CASES

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Background Cystic lymphangiomas are rare congenital benign malformations of the lymphatic system. They are commonly located in the cervicofacial region. Clinical presentation depends on localization. Through this study we aim to identify epidemiology, clinical features, management and outcome of cystic lymphangiomas in the newborn.

Methods It's a retrospective study of all cases of cystic lymphangiomas registered in the neonatal intensive care unit of Sfax between 2008 and 2018.

Results Six full term newborns were included with a female: male ratio of 4:2. Prenatal diagnosis was performed in all cases. At birth all newborns was asymptomatic. Post natal diagnosis was based on the ultrasound study in all cases. Magnetic resonance imaging was performed in three cases. We registered cervical localization in three cases, cervicomedastinal localization in one case, carvicomedastinal localization associated to multiple lesions of the right arm in one case and perirenal localization in one case. The mean size of masses was 8.6 cm (5 to 15 cm). Total resection was performed successfully for the perirenal lymphangioma at day 22 of life. In the post operative course the newborn developed a transient hypertension and an urinoma that regressed after 10 days of drainage. Incomplete resection was performed in one newborn

having cervicomedastinal localization with close relation to the atrium leading to severe respiratory distress at day 4 of life. The patient died of severe sepsis on the post operative course. Embolization was proposed for two newborns but they rapidly died. For the two other cases we opted for monitoring. Spontaneous regression was then noted. No recurrence was registered in all surviving newborns.

Conclusions Cystic lymphangiomas can arise in any organ or soft tissue. Mediastinal and abdominal localization are rare. Management and outcome depends on localization and relationship with adjacent structures. Less invasive therapeutic option and new therapies continue to emerge. However till now there are not uniform therapeutic protocols.

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TRANSCATHETER ARTERIAL EMBOLIZATION AS AN INNOVATIVE MANAGEMENT STRATEGY IN A PRETERM NEONATAL CASE OF COMPLICATED INFANTILE HEPATIC HAEMANGIOENDOTHELIOMA

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Infantile hepatic haemangioendothelioma (IHH) is the commonest benign vascular tumour occurring in the first six-months of life. Medical treatment is first-line but a transcatheter arterial embolization (TAE) was also used in this preterm neonatal case; this is an innovative procedure used to reduce hepatic shunting by occluding the feeding vessels.

Case report A 2.09 kg male infant was delivered at 31⁺3 weeks by emergency C-section. There were antenatal concerns regarding ascites and dilated bowel loops and at delivery he was noted to have hydrops. He required intubation and high frequency oscillatory ventilation. Extensive bruising and active bleeding from multiple sites was noted, so the massive blood transfusion protocol was initiated. An ejection systolic murmur was heard and he had hepatomegaly.

Initial blood-work showed anaemia and disseminated intravascular coagulopathy. Thrombocytopenia was likely from Kasabach-Merritt syndrome (KMS). He also had deranged liver enzymes, jaundice and an acute kidney injury. AFP, thyroid function tests and urinary VMA were reassuring. Echocardiography demonstrated a small PDA and moderately impaired biventricular function. Abdominal ultrasound showed a mixed lesion involving both liver lobes, measuring 8.2×5.7 cm with dilated hepatic veins and ascites. MRI was not possible due to his unstable clinical condition.

A large number of blood products were required including recombinant factor 7. Regular vitamin K and broad-spectrum antibiotics were initiated. Propranolol and dexamethasone were commenced to try to shrink the lesion. On day 3 of life he had embolization of his AVM, this was a novel procedure and involved accessing the coeliac axis via the umbilical artery and releasing micro-particles. Satisfactory devascularisation was achieved.

Despite this innovative technique, he deteriorated secondary to high-output CCF, pulmonary oedema, anuria and hepatic failure. It was apparent to his parents and the multidisciplinary team that he would not survive and life-sustaining care was withdrawn on day 6.

Discussion It is clear that a multidisciplinary approach is required for the best treatment options. Corticosteroids