MANAGEMENT OF ABDOMINAL MASSES IN THE NEWBORN: EXPERIENCE OF THE NEONATOLOGY DEPARTMENT OF SFAX (TUNISIA)

Chiraz Regaieg,1 Rim Zaghdoud,1 Amel Bouraoui,1 Nedia Hmida,1 Riadh Mhiri,1 Afef Ben Thabet,1 Abdellatif Gargouri,1 Chiraz Regaieg*,1 Rim Zaghdoud,1 Hayet Zitouni,2 Hedia Hmida,2 Rafida Mhiri,2 Afef Ben Thabet,2 Abdellatif Gargouri,2
1Department of neonatology, Hedi Chaker Hospital, Sfax, Tunisia
2Department of pediatric surgery, SFax, Tunisia

Background Abdominal masses in neonates reflect a wide spectrum of diseases, from lesions that can cause significant morbidity and mortality, to conditions ready corrected surgically, to entities which may be safely observed.

Objective To evaluate epidemiology, clinical features, management and outcome of abdominal masses in the newborn.

Methods It’s a retrospective study of all cases of abdominal masses registered in the neonatology department of Sfax between 2004 and 2019.

Results Thirteen patients were included in the study. A female predominance was noted (sex ratio = 0.18). Antenatal diagnosis was made in 10 cases. Seven patients were born via cesarean section. The mean gestational age was 37.7 weeks. Mean birth weight was 3160 g. Three patients had fetal acute suffering and respiratory distress. The most frequent physical finding was palpable abdominal mass (n=9). Ultrasonography (n=13), abdominal scan (n=3) and MRI (n=4) were used for diagnosis. Tumor sizes ranged from 4.6 to 10 cm. We had identified renal cystic lymphangioma (n=1), Infantile myofibromatosis (n=1), ileal duplication (n=3), hydrocolpos (n=4) and ovarian cysts (n=4). Total resection was the treatment for ileal duplication, ovarian cysts and lymphangioma cysts cases. The newborn with infantile myofibromatosis received medical treatment (vincristine) after incomplete resection. The treatment of hyrocolpos was based on simple hymenotomy in two cases and laparotomy in the other two complicated cases. Mean follow-up time was 24 months. Only one patient who had giant hydrocolpos died of refractory shock and acute kidney failure 3 days after surgery.

Conclusions Most neonatal abdominal masses are due to benign lesions. Some of them may provide diagnostic difficulties. Most of masses require surgical treatment, which can be safely performed in small infants by trained personnel. However genuine controversy exists in the management of some lesions including infantile myofibromatosis.

PLANNING FOR THE NEW CHILDREN’S HOSPITAL: USE OF THE NEONATAL UNIT OF TEMPLE STREET CHILDREN’S UNIVERSITY HOSPITAL

Snead Branick*, Gracie Grilly, Rachel McCallon, Temple Street Children’s University Hospital, Dublin, Ireland; National Maternity Hospital, Dublin, Ireland; School of Medicine and Medical Science, University College Dublin, Dublin, Ireland; The Rotunda Hospital, Dublin, Ireland; School of Medicine, Royal College of Surgeons Ireland, Dublin, Ireland

Aims The neonatal service of Temple Street Children’s University Hospital (TSCUH) includes St. Michael’s B ward (SMB; 8 beds) and the HDU (6 beds). Admissions to the HDU are restricted to transfers from maternity hospitals (Brennan & Murphy, 2018). The new children’s hospital (NCH) will establish a single entity to integrate the services currently provided by TSCUH, OLCHC, and the NCH Tallaght (Department of Health, 2017). The aim of this study is to produce qualitative analysis of the patient population/resource use in the neonatal HDU/SMB in order to plan for delivery of care in the NCH.

Methods Using the nursing admissions books, data was retrospectively collected for 6 months of admissions (July to December 2017).

Results In the HDU (N=59), 15% of patients had a CGA of <37/40. The median age was 5 days; the median LOS was 8 days (range: 1 – 125 days). 71% of patients were jointly admitted by Neonatology/surgical specialty. The most common diagnoses were myelomeningocele (14%) and TOF (12%). 19% of patients required NIV; 27% received TPN.

In SMB (N=279), 2% of patients had a CGA of <37/40. The median age was 6 weeks; the median LOS was 2 days (range: 1 – 22 days). 71% of patients were admitted under the care of General Paediatrics. The most common diagnosis was bronchiolitis (22%) with a clear seasonal trend observed. 9% of patients required NIV.

Conclusion The neonatal ward in TSCUH offers a unique service, allowing access to specialist care that is not available in the maternity hospitals, and providing a high level of support to term/premature newborns. It is clear that a specialised neonatal ward is necessary to safely care for this patient population, along with separation from the significant burden of infection that is present on high-turnover general wards. We recommend the inclusion of a similar unit in the NCH.

REFERENCES

ASSOCIATION OF MATERNAL HEMOGLOBIN LEVEL WITH GESTATIONAL AGE AND BIRTH WEIGHT OF BABIES

Manoj Kumar Chaudhary*, Nisha keshari Bhatta, Mohan Chandra Regmi, Rupa Singh, Panichi Upadhyay, BP Koirala Institute of Health Sciences, Dharam, Nepal; P.K. Memorial Hospital, Karjanna, Nepal

Background Two million people, that is over 30% of world’s population is anemic. In Nepal prevalence of anemia in pregnancy is 42% and low birth weight varies from 12 to 15%.

REFERENCES
1. Manoj Kumar Chaudhary*, Nisha keshari Bhatta, Mohan Chandra Regmi, Rupa Singh, Panichi Upadhyay, BP Koirala Institute of Health Sciences, Dharam, Nepal; P.K. Memorial Hospital, Karjanna, Nepal

Arch Dis Child: first published as 10.1136/archdischild-2019-epa.782 on 12 June 2019. Downloaded from http://adc.bmj.com/ on September 20, 2023 by guest. Protected by copyright.
ROLE OF SERUM PROCALCITONIN AS MARKER OF NEONATAL SEPSIS

Background Despite the advances in perinatal and neonatal care and use of newer potent antibiotics, the incidence of neonatal sepsis remains high and the outcome is still severe. Early diagnosis of neonatal sepsis followed by appropriate treatment decreases mortality and morbidity in infants.

Objective To study the ROLE OF SERUM PROCALCITONIN AS A MARKER OF NEONATAL SEPSIS and To compare procalcitonin with CRP as a diagnostic marker for neonatal sepsis

Methodology Hospital Based prospective observational study.

Results 50 neonates (preterm &term) with clinically suspected sepsis were studied during 1 year from Jan 2016 to Dec 2016 in Chaitanyar Hospital Chandigarh. Conventional sepsis workup was done in all cases and the diagnosis of neonatal sepsis was proved based on the results of blood culture. The serum Procalcitonin was measured by quantitative Enzyme linked immunofluorescence assay and the results were compared to CRP levels between the neonates with or without proven sepsis.

Results Of the total 220 babies admitted in NICU during that period 50 were eligible for study and analyzed. 24% babies had Definite Sepsis, 60% had Probable Sepsis and 16% babies had No Sepsis. Of the neonates with suspected sepsis 24% had culture positive and 76% were culture negative. Mean PCT level was 13.27+ 33.2 ng/ml. The mean PCT levels were higher in Meningitis group (Mean PCT-26.45) than no meningitis group. (p value-0.216). The mean PCT levels was highest in neonates whose TSLC>5000 (Mean PCT-18.5) (p value-0.002). The mean PCT levels were higher in all 3 infection groups in neonates with CRP>0.5 mg/dl (positive) than that of neonates with CRP<0.5 mg/dl (negative). Mean PCT levels were 0.433, 0.22 and 0.27.5 in no infection, probable infection and definite infection group respectively. (p value-0.01) Evaluating CRP as a diagnostic marker for definite neonatal sepsis with cut off value as 0.5 mg/dl, had sensitivity of 41.67%, Specificity of 89.47%, Positive Predictive Value of 55.56% and Negative Predictive value of 82.93%. Evaluating PCT as a diagnostic marker for definite neonatal sepsis. The Sensitivity, Specificity, Positive Predictive Value, Negative Predictive Value were 83.3%, 26.32%, 26.32% and 83.3% respectively taking cut-off level of procalcitonin to be >0.5 ng/ml.

Conclusion The importance of procalcitonin in diagnosing neonatal septicaemia becomes more useful when it is used along with other investigations. Especially in identifying the group of neonates who may not be infected and may not require antibiotics.