Management of Abdominal Masses in the Newborn: Experience of the Neonatology Department of SFAX (Tunisia)

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Background Abdominal masses in neonates reflect a wide spectrum of diseases, from lesions that can cause significant morbidity and mortality, to conditions readily 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 hydrocolpos 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: Analysis of Patient Population and Resource Use in the Neonatal Unit of Temple Street Children’s University Hospital

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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, OLCCH, 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 myeloenmignecoele (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

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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...