Results There were 3 males and two females. Prenatal diagnosis was made in 4 cases. There were 4 full's term newborns and one near term of 36 weeks. Pleural effusion was on the right side in three cases, on the left side in one case and bilateral in one case. Four cases required mechanical ventilation. Somatostatin was indicated in one case. The treatment was successful in four cases. One case presented a dysmorphic syndrome was died by pneumothorax.

Conclusions The treatment of congenital chylothorax is based on conservative management. Somatostatin or its analog octreotide are considered as an adjunctive treatment of congenital chylothorax. However, the refractory cases are treated with chemical pleurodesis or surgical treatment. We propose an algorithm of the treatment of congenital chylothorax after review of the literature.

P640 NEONATAL ARRHYTHMIAS: A 20 CASES STUDY

¹Manel Charfi*, ¹Amel Ben Hamad, ¹Mouna Loukil, ¹Chiraz Regaieg, ¹Amira Bouraoui, ¹Ridha Regaieg, ¹Nedia Hmida, ²Dorra Abid, ²Samir Kammoun, ¹Afef Ben Thabet, ¹Abdellatif Gargouri. ¹Department of Neonatology, Hedi Chaker University Hospital, Sfax, Tunisia; ²Department of Cardiology Hedi Chaker University Hospital, Sfax, Tunisia

10.1136/archdischild-2019-epa.971

Introduction Arrhythmias in neonates are rare with an incidence reported to be 1 to 5%. Their diagnosis and treatment differs substantially from approaches used in an older child. Through this study we aim to identify epidemiology, clinical features, management and outcome of neonatal arrhythmias.

Patients and methods It's a retrospective study of all cases of arrhythmias hospitalized in the neonatal intensive care unit of Sfax between 2004 and 2018.

Results We registered 10 cases of congenital atrioventricular block (AVB), 8 cases of flutter and 2 cases of chaotic tachycardia. A male predominance was noted with a sex ratio of 2.3. Prenatal diagnosis was performed in 5 cases of atrial flutter by fetal echocardiography which was indicated because of fetal anasarca in 3 cases, a dilatation of the right heart cavities in one case and a fetal tachycardia in one case. Prenatal treatment was administered in 4 cases of atrial flutter. It was based on amiodarone in one case, digoxin in two cases and digoxin associated with sotalol then relayed by flecainide in one case. Ten newborns presented signs of heart failure. For the others, the clinical manifestation was an anomaly of the heart rhythm (bradycardia or tachycardia). Diagnosis was confirmed in all cases by electrocardiogram. Echocardiography was performed for all patients. It showed tight pulmonary narrowing in a case of flutter and transient myocarditis associated to an AVB in one case. After birth, an external electric conversion was necessary in 4 cases of atrial flutter and a pacemaker implantation was indicated in 5 cases of AVB. In the other cases, the treatment was medical (amiodarone for tachycardia and Isoproterenol for AVB). Only 4 newborns with AVB died in the post operative course of the pace maker implantation. For all other newborns the evolution was favorable.

Conclusion Neonatal arrhythmias can be serious and life threatening. The prognosis depends on the prompt of diagnosis which can be challenging at this age. Management must be rapid and multidisciplinary. Hence we insist on the importance of prenatal diagnosis.

P641 MANAGEMENT OF CARDIAC RHABDOMYOMA IN NEONATES

¹Manel Charfi*, ¹Rim Zaghdoud, ¹Amel Ben Hamad, ¹Chiraz Regaieg, ¹Amira Bouraoui, ¹Ridha Regaieg, ¹Nedia Hmida, ²Dorra Abid, ²Samir Kammoun, ¹Afef Ben Thabet, ¹Abdellatif Gargouri. ¹Department of Neonatology, Hedi Chaker University Hospital, Sfax, Tunisia; ²Department of Cardiology Hedi Chaker University Hospital, Sfax, Tunisia

10.1136/archdischild-2019-epa.972

Introduction Cardiac tumors are rare in infant. Most commonly it's a Rhabdomyoma with an incidence of 0.02% to 0.08%. These cardiac rhabdomyomas are usually multiple with a preferential location in the ventricular myocardium (up to 94%). We aim to evaluate the epidemiology, clinical features, management and outcome of this rare condition in neonates.

Methods It's a retrospective study of all cases of cardiac rhabdomyomas registered in the neonatal intensive care unit of Sfax between 2009 and 2018.

Results Six full term newborns were included: one boy and five girls. Two of them were twins from a monochorial and monamniotic pregnancy. Prenatal diagnosis was performed in all cases. After birth, all newborns were asymptomatic. Physical exam revealed associated hemangiomas of the forearm in one case and hypomelanotic macules in 4 cases. Postnatal echocardiography confirmed the prenatal findings in all cases. Multiple lesions were noted in 4 cases. Ventricular location was found in all cases. Associated interventricular septum tumor was found in one case as well as a right atrium tumor in one other case. The mean tumor size was 16 *10 mm. No hemodynamic disorders were noted in all cases. The ophthalmologic and renal assessment was normal for all newborns. Brain MRI was performed in 4 cases. It revealed white matter anomalies and subependymal nodules confirming then the *diagnosis of tuberous sclerosis* in two patients. During follow up one of them developed focal seizures fully controlled by antiepileptic drugs. The evolution was favorable for all patients. All tumors regressed spontaneously within an average of three years.

Conclusion Cardiac rhabdomyomas are benign tumors which tend to spontaneously regress during early childhood. However they may lead to arrhythmias or hemodynamic disorders due to ventricular inflow/outflow tract obstruction. Thus long term ultrasound follow up is needed. Moreover diagnosis of cardiac rhabdomyoma must lead clinician to look systematically for an associated tuberous sclerosis as it can be its earliest manifestation.

P642 NEONATAL GASTRIC DUPLICATION CYST: A CASE REPORT

¹Amel Ben Hamed, ¹Manel Charfi*, ²Hayet Zitouni, ¹Chiraz Regaieg, ¹Amira Bouraoui, ¹Ridha Regaieg, ¹Nedia Hmida, ²Riadh Mhiri, ¹Afef Ben Thabet, ¹Abdellatif Gargouri. ¹Department of Neonatology, Hedi Chaker Hospital, Sfax, Tunisia; ²Department of Pediatric Surgery, Hedi Chaker Hospital, Sfax, Tunisia

10.1136/archdischild-2019-epa.973

Background Gastrointestinal duplication(GID) cysts are rare congenital malformations. It occurs approximately in 1 out of 10.000 births. It can occur at any part of the alimentary tract. Gastric duplication cyst constitute 2 to 7% of all GID. They are usually cystic and located on the greater curvature,

and ; have no communication with the gastric lumen. GID are diagnosed most commonly in the first 2 years of age. Early diagnosis and surgical correction in the neonatal period usually are advocated to avoid potential morbidity and mortality.

Case report In this report, we present a 3-days-old newborn with antenatal diagnosis of gastric duplication confirmed postnatally. It was successfully managed using open surgical resection. Histology confirmed the diagnosis. The postoperative course was uneventful. At 5 months, the infant had a good follow-up.

Conclusion Gastric duplications are very rare in newborns. Symptoms are atypical. Antenatal diagnosis is possible and allowed planning management. The treatment is based on a complete excision. Laparoscopic surgery is successful but needs to prove its safety and effectiveness.

P643

RISK FACTORS FOR POSTOPERATIVE MORTALITY IN CONGENITAL DIAPHRAGMATIC HERNIA: A STUDY OF 29 CASES

¹Chiraz Regaieg*, ¹Douha Kamoun, ¹Rim Zaghdoud, ²Zitouni Hayet, ¹Amel Ben Hamed, ¹Manel Charfi, ¹Amira Bouraoui, ¹Nedra Hmida, ²Riadhi Mhiri, ¹Afif Ben Thabet, ¹Abdellatif Gargouri. ¹Department of Neonatology, Hedi Chaker Hospital, Sfax, Tunisia; ²Department of Pediatric Surgery, Hedi Chaker Hospital, Sfax, Tunisia

10.1136/archdischild-2019-epa.974

Background Congenital diaphragmatic hernia (CDH) is one of the more common congenital anomalies with a frequency of 1/2200 live births. Despite progress in antenatal diagnosis and neonatal care, mortality for CDH remains high close to 30–40%. Several factors have been recognized as correlating with the prognosis of CDH such as pulmonary hypoplasia and pulmonary arterial hypertension. The aim of this study was to identify predictive factors of mortality after surgical management of CDH.

Methods It is a retrospective study of all cases of CDH that were admitted at the neonatology department and were operated in the department of pediatric surgery in Sfax (Tunisia) from 2010 to 2018. The risk factors investigated were sex, prenatal diagnosis of CDH, gestational age, birth weight, Apgar score, left side of CDH, inhaled nitric oxide, vasoactive support, delay to surgery and surgical duration.

Results During the 9-year period, twenty nine patients were included. Of those nine were right sides and twenty were left sides. 58.6% patients were male and 41.4% were female. The mean gestational age was 38.3%. Six infants were premature. One newborn had a congenital heart disease. Antenatal diagnosis was performed in only 38% of cases (n=11). Twelve newborns had low Apgar score. The mean hospital stay was 9, 6 days. Mortality rate was 62%. There was no statistically significant difference between survival and death groups in terms of sex, prenatal diagnosis of CDH, gestational age, left side of CDH, inhaled nitric oxide and delay to surgery. However, low Apgar score and birth weight <2700 g were independently associated with postoperative mortality.

Conclusion Despite advances in neonatal resuscitation, mortality for CDH remains high. Our study showed that low Apgar and low birth weight are risk factors for mortality.

P644

MANAGEMENT OF CONGENITAL PULMONARY MALFORMATIONS: A REPORT ON 9 CASES

Amel Ben Hamed, Chiraz Regaieg*, Adel Babay, Manel Charfi, Amira Bouraoui, Nedra Hmida, Ridha Regaieg, Afif Ben Thabet, Abdellatif Gargouri. Department of Neonatology, CHU HEDI Chaker, Sfax, Tunisia

10.1136/archdischild-2019-epa.975

Background Congenital lung malformations (CLMs) comprise a group of anatomical abnormalities of the respiratory tree. The most common of which include congenital cystic adenomatoid malformation (CAM), bronchopulmonary sequestration (PS), bronchial atresia, congenital lobar emphysema (CLE) and bronchogenic cyst. These anomalies are detected with increasing frequency by pre-natal sonography. When symptomatic, there is little controversy that resection is indicated, which is usually curative. When a lesion is asymptomatic there is greater debate regarding the benefit of resection versus continued observation. The aim of this study is to analyse the management options available and the medium-term outcomes associated with each treatment option.

Methods We enrolled neonates who were admitted to the department of neonatology at Hedi Chaker hospital, Sfax (Tunisia) within the ten last years and suffered from CLMs.

Results Nine cases were reviewed. Among these 8 were boys (88%) and 3 neonates were preterm. The diagnosis was prenatal in 6 cases (66%) and foetal sonography was abnormal in 8 cases (88%). The adaptation to extrauterine life was good in 8 cases (88%). Six infants (66%) were symptomatic when admitted to neonatal unit. Radiological investigations leded to the diagnosis in all cases: 5 CAM, 3 PS and CLE in 1 case. Surgery was indicated for three patients. Two were operated before the age of 7 days due to severe clinical symptoms. The other patient was operated at the age of 7 years for possible malignant transformation of a PS. The surgical treatment involved a lobectomy for 2 patients and a thoracoscopy with malformation's in the other case. The histopathological examinations confirmed the diagnosis in all cases. Except for one patient with CAM, who died a few days after a lobectomy due to acute nosocomial pneumonia, the evolution was good for 8 children with a mean of follow-up of 24 months (10 months to 10 years).

Conclusion While the neonatal management of symptomatic CLMs is clear and includes prompt surgery, controversies remain for asymptomatic CPAM due to risk of infections and malignancies.

P645

AN AUDIT TO IMPROVE NEONATAL READMISSION NUMBER AT WEXFORD GENERAL HOSPITAL

Riaz Ahmed*, Naeem Shori, Allie Bone, Muhammad Jawad. Wexford general hospital, wexford, Ireland

10.1136/archdischild-2019-epa.976

Introduction A readmission within a few weeks after discharge of an ostensibly healthy new-born from a well-baby nursery and postnatal ward is an undesirable event for parents, physicians, and payers. Such a readmission may reflect an inadequate assessment of the new-born's readiness for discharge, a lack of resources and/or an inability of a parent to provide early new-born care, or inappropriate and/or untimely availability of, or access to, outpatient care. Potentially preventable