

Abstract 207 Table 1

Categories	Nov-18	Dec-18	Mar-19	Apr-19	May-19	Jun-19	Aug-19	Sep-19
Drs	12	11	12	16	14	13	14	12
Nurses	-	-	-	-	1	-	-	2
Other	-	-	-	-	-	-	-	3

Abstract 207 Table 2

	Oct-19	Nov-19	Dec-19	Feb-20	Apr-20	May-20	Jun-20	Aug-20	Sep-20	Oct-20
Paediatricians	18	10	19	8	21	24	12	12	5	10
Nurses	-	-	1	-	2	1	1	-	-	-
Students	-	-	-	-	1	-	-	1	-	-
Anaesthetics	-	-	-	1	1	-	1	1	1	2

paediatricians. Strategies include re-iterating 'everyone being welcome' and making people aware of what the meeting entails. Through increasing attendance this reduces the 'silo' nature of M&M meetings thus ensuring learning is shared.

Whilst it was observed that attendees reported a preference to learning at/in the meetings the ongoing pandemic has limited the opportunity for in real life interactions this project has shown that asynchronous learning can still occur from key aspects of the cases.

In addition to continuing to increase MDT attendance interventions include: evaluating the learning experience regarding how other, future cases are managed and actioning the learning points generated.

209

### A PROSPECTIVE STUDY ON THE PREVALENCE OF SLEEP DISTURBANCES IN CHILDREN WITH AUTISM SPECTRUM DISORDER IN A TERTIARY CENTRE

Harminder Kaur Karnail Singh, Ranjini S Sivanesom, Karuthan Chinna, Charlotte Jane Joseph. *Malaysia*

10.1136/bmjpo-2021-RCPCH.113

**Background** Numerous studies have shown that sleep disturbances are common in children with autism spectrum disorder. However, to the best of the authors' knowledge, there is no local study to date looking at the prevalence of sleep disturbances in children with autism spectrum disorder and its impact on the child's behaviour.

**Objectives** The primary aim of this study was to determine the prevalence of sleep disturbances among children with autism spectrum disorder aged between 2 to 5 years old. The secondary aim was to determine the relationship between sleep disturbances and behavioral problems in these children.

**Methods** This study was conducted at a tertiary center from June 2020 to December 2020. Children between 2 to 5 years of age, who were diagnosed with autism spectrum disorder based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria by a developmental paediatrician, were enrolled in this study during their routine clinic appointment. Guardians were given two questionnaires, the Children's Sleep Habits Questionnaire (CSHQ) and Child Behavior Checklist (CBCL/1.5-5), to be answered. Children who had refractory epilepsy, chromosomal abnormality and

Abstract 209 Table 1

	Good sleeper (n=9)	Poor sleeper (n=125)	p-value
	Median (IQR)	Median (IQR)	
	CBCL T scores	CBCL T scores	
Internalizing problems	56 (21)	62 (9)	0.040
Externalizing problems	47 (16)	59 (13)	0.002
Total problems	51 (20)	62 (11)	0.001

absence of a guardian to answer the questionnaires were excluded.

**Results** 139 children were recruited in the study. 5 children dropped out, giving a sample size of 134. The mean age (SD) was 42.23 (9.95) months. There were 109 males (81.3%) and 25 females (18.7%). Children were classified as good sleepers (CSHQ score of less than 41) and poor sleepers (CSHQ score of greater than 41). 9 (6.7%) children were good sleepers and 125 (93.3%) were classified as poor sleepers. The mean score (SD) on the CSHQ was 49.77 (6.90). The internalizing, externalizing and total problems T score, as measured by the Child Behavior Checklist, was significantly higher in the poor sleeper group compared to the good sleeper group.

**Conclusions** The prevalence of sleep disturbances in the study population is high at 93.3%.

These children tend to have a higher internalizing, externalizing and total problems on the CBCL, suggesting poor sleep negatively affects the behavioral outcome in children with autism spectrum disorder.

210

### NEONATAL SEPTIC HEPATITIS

Toufik Abdul-Rahman, Andrew Awuah Wireko, Valentina Plakhuta, Iryna Shkolna. *Ukraine*

10.1136/bmjpo-2021-RCPCH.114

**Background** Topicality. In the modern world in neonatal intensive care units mortality from sepsis remains one of the leading causes of neonatal death. In cases of severe sepsis, the disease occurs with the phenomena of multiple organ failure, and the liver may be involved in the pathological process. The NEOMOD (Neonatal Multiple Organ Dysfunction Score)

is used to assess organ dysfunction, including liver. According to this scale, the main criterion for liver damage is an increase in alanine aminotransferase (ALT) activity over 50% of baseline. Also, the enzymatic activity of ALT may be increased in newborns with parenteral nutrition.

**Objectives** The purpose of the study: to study the clinical and laboratory, instrumental and pathomorphological features of septic hepatitis in newborns.

**Methods** An analysis of 32 inpatient maps of children (of which 29 - (90.6%) premature in gestation 27 - 34 weeks) with septic hepatitis. The only diagnostic criterion was considered to be a combination of the above components with systemic inflammatory response syndrome (SIRS - systemic inflammatory response syndrome).

**Results** Hepatomegaly was detected in 25 (78%) patients. Hemorrhagic syndrome was detected in 22 (68.7%) infants, most often in the form of pulmonary or gastrointestinal bleeding. Changes in hemostasis in patients were accompanied by an increase in activated. Splenomegaly was detected in 3 (9.4%) children as a result of hyperplasia of the reticulohistiocytic tissue of the organ in response to sepsis and hepatitis. Conjugated hyperbilirubinemia was detected in all 32 patients (100% of cases). Decreased prothrombin index was observed in 25 children (78%), and increased levels of alanine aminotransferase and aspartate aminotransferase (ALT, AST) in 23 (72%). Hypoproteinemia was observed in 12 children (37.5%). Ultrasound in septic hepatitis in 28 (87.5%) patients was characterized mainly by changes in the liver parenchyma and its vascular system, sometimes in combination with biliary tract lesions in the form of thickening of the gallbladder walls and heterogeneity of its contents.

**Conclusions** Clinical symptoms of septic hepatitis are accompanied by jaundice, in most children hepatomegaly and hemorrhagic syndrome. The main laboratory criteria for septic hepatitis were: conjugated hyperbilirubinemia (100%), decreased prothrombin index (78%) and increased levels of ALT and AST (72%). The most unfavorable prognosis was observed as a result of penetration of the pathogen into the liver through the umbilical vein. In these cases, morphologically formed necrotic hepatitis with total damage to all parts of the hepatobiliary system. The clinical symptoms of the disease were characterized by severe hepatic insufficiency with impaired basic liver function and very high mortality.

212

#### CHALLENGES IN THE MANAGEMENT OF EXTENSIVE APLASIA CUTIS CONGENITA

Alvin Ngeow, Cheryl Hui, Mark Koh, Darryl Chew, Yee Siang Ong, Woei Bing Poon. Singapore

10.1136/bmjpo-2021-RCPC.H.115

**Background** Aplasia cutis congenita (ACC) is a rare group of congenital disorders characterised by focal or widespread absence of skin, predominantly affecting the scalp, although other areas of involvement have been reported. The exact pathogenesis is unknown, although several theories have been proposed including neural tube defect, vascular compromise from placental insufficiency, intra-uterine infections, genetic mutations, teratogens, and ischemic or thrombotic events related to fetus papyraceus. ACC patients with large scalp defects, often associated with skull defects and/or exposed

dura and superior sagittal sinus have reportedly suffered morbidity or demised from catastrophic haemorrhage from the sagittal sinus, and/or suffered meningitis. Diagnosis is mostly clinical. There is no consensus for the management of ACC given the rarity and variability in terms of the clinical presentation (site) and extent of ACC. Management approaches include conservative treatment, which involves dressing of the aplastic skin until complete re-epithelialisation, and surgical management, which include excision and closure, skin grafting, local flaps and tissue expansion.

**Objectives** This report describes the treatment of an extensive case of ACC.

**Methods** The child was managed by a multidisciplinary team comprising the neonatologist, paediatric dermatologist, plastic surgeon, hand surgeon and geneticists.

**Results** The areas of involvement included most of the scalp and posterior neck, with sparing of the forehead, anterior chest and abdomen, with small portions of the back. Small areas of ACC at joint creases of lower limbs and bilateral upper limbs and bilateral groin regions were also noted. In all, 33.5% body surface area was involved. Both conservative and surgical approaches were considered. On top of the inherent risks associated with conservative management of ACC, such as wound infection, electrolyte abnormalities, and delayed wound healing, this baby was at risk of potentially catastrophic haemorrhage and meningitis due to the large scalp defect. As such, coverage for the scalp was prioritised. Options for skin cover included allograft versus autograft; latter was preferred due to reduced risk of rejection. This approach was limited by the availability of donor sites due to extensive ACC and risks of donor site morbidity. Cultured epithelial autograft (CEA) was preferred but could only be ready after three weeks of tissue culture. As a bridging measure, artificial dermal matrix (ADM) in the form of Integra (R) was applied to the scalp, and other areas, prior to application of the CEA at about 3 weeks of life. The baby was essentially planned for a 2-stage approach to provide urgent skin cover. The baby also received empiric antibiotic coverage and regular wound dressing with topical antibiotics.

**Conclusions** Aplasia cutis congenita is a rare and potentially life threatening congenital similar to a burns patient, but can suffer from catastrophic morbidity related to exposed sagittal sinus in cases where scalp involvement is extensive. In such cases, we propose prompt surgical coverage of the scalp. We report treatment of a case of extensive ACC involving most of the scalp, using a 2-stage approach, which first entails the application of Artificial Dermal Matrix (ADM), followed by the application of Culture Epithelial Autograft (CEA) when the graft is ready.

213

#### PHENOMENOLOGY OF PEDIATRIC MOVEMENT DISORDERS: FIRST STEP FOR DIAGNOSIS

Yeemon Wint Aung, Aye Mu San. Myanmar

10.1136/bmjpo-2021-RCPC.H.116

**Background** Movement disorders are broad group of acute and chronic neurological conditions in children and it has been increasingly recognized worldwide because of disturbance of activities of daily living and quality of life. Because of diagnostic and therapeutic challenges for movement disorders, phenomenology plays the key role in diagnosis of specific