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A01 - MATERNAL MORTALITY DUE TO ECLAMPSIA: THE IMPORTANCE OF PLACENTA EVALUATION

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Introduction: Hypertension in pregnancy especially eclampsia contributes significantly to maternal and fetal mortality and morbidity worldwide. Pathological changes occur in the placenta which affects the blood flow supplying the fetus. Pathological changes may also be seen in the brain, liver as well as uterine and kidney vasculature of the mother. *Case report:* A 25-year-old, normotensive primigravida at 36 weeks of gestation with underlying gestational diabetes mellitus presented to a health clinic with two-days history of bitemporal headache. Her blood pressure on that day was 149/97 mmHg. Urine protein test was not performed. She was diagnosed as tension headache and discharged home. The symptoms worsened with blurring of vision. She subsequently fainted and collapsed at home. She was resuscitated and was brought to hospital. A perimortem Caesarean section revealed a fresh still birth. Unfortunately, she died after two days in Intensive Care Unit (ICU). The examination of the placenta revealed retention of smooth muscle within few maternal vessels with no acute atherosclerosis. The autopsy showed findings consistent with disseminated intravascular coagulopathy without any evidence of chronic or accelerated hypertension. *Discussion:* A thorough placenta examination is paramount to evaluate any underlying maternal pathology as the post mortem findings may be non-specific to show events leading to maternal death in acute onset of eclampsia.

A02 - IMMATURE OROFACIAL TERATOMA (EPIGNATHUS) IN A 22-WEEK FOETUS

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Introduction: Epignathus is a rare orofacial teratoma and exclusively seen in childhood, particularly neonates. It is infrequently associated with intracranial lesion, thus, need to be differentiated with other intracranial tumours. *Case report:* Herein, we report the post-mortem findings of a case of immature teratoma of the orofacial region in a 22 weeks old stillborn foetus. These facial and intracranial abnormalities were detected antenatally during routine second trimester ultrasound. Examination revealed a large tumour protruded from the mouth and arises from the left palate, measuring 7.0 x 5.5 x 2.0 cm and weighed 60 grams. An intracranial tumour was also identified compressing the left hemisphere of the brain, measuring 6.0 x 5.0 x 3.0 cm and weighed 60 grams. The base of skull was intact with no communication with the intra-oral tumour. The brain was compressed and distorted by the tumour. Microscopically, both the orofacial and intracranial tumour were immature teratomas, with predominantly immature glial tissue. It is a Grade 3 tumour. *Discussion:* A careful evaluation is needed in suspected case of epignathus with intracranial extension. Epignathus with intracranial extension is infrequently encountered and carries a poor prognosis. Other possible orofacial tumours include congenital epulis, basal cephalocele, dermoid, lymphatic malformation and rhabdomyosarcoma.

A03 - HISTOLOGIC CHORIOAMNIONITIS WITH FOETAL INFLAMMATORY RESPONSE INCREASES RISK OF CAESAREAN SECTION AND NICU ADMISSION

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Introduction: The foetal inflammatory response syndrome (FIRS) is a condition characterized by systemic inflammation and increased interleukin-6 level. FIRS is a risk factor for perinatal morbidity and mortality, and may lead to multiorgan involvement in the hematopoietic system, thymus, adrenal glands, skin, kidneys, heart, lung, and brain. The aim of this study was to determine the obstetrics and neonatal outcomes of chorioamnionitis with and without FIR. *Materials and Methods:* A total of 132 placenta of mother with chorioamnionitis was retrieved. They consisted of 52 cases of chorioamnionitis with FIR and 80 cases without FIR. All placentae were assessed for evidence of FIR. Histologic evidence of FIR includes foetal chorionic vasculitis, umbilical phlebitis and arteritis. *Results:* The average age of mother with chorioamnionitis and FIR was 30.3 years which is comparable with those without FIR (30.5 years) (p=0.777). In chorioamnionitis with FIR, majority

were Malay (44/52), followed by Chinese (6/52) and Indian (2/52). Forty six percent of mother with FIR were primigravida. The mother with FIR was more likely to undergo caesarean section compared to mother without FIR ($p=0.023$). In addition, the pregnancy was higher risk of NICU admission ($p=0.018$). *Discussion:* The presence of histologic chorioamnionitis with FIR is more likely to lead to caesarean section and NICU admission. Neonatal care is crucial in the neonates of this group, this indicates the need of histologic reporting of FIR.

A04 - PAEDIATRIC GLIOBLASTOMA: A RARE ENCOUNTER

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Introduction: Glioblastoma is a deadly brain tumour known to occur in adults. It accounts for less than 2% of cases in childhood, with prognosis far worse than other commoner paediatric cancers such as lymphoma, leukaemia and Ewing sarcoma. *Case report:* A previously healthy 8-year-old boy presented with a one-week history of headache, vomiting and blurred vision. Eye examination revealed bilateral papilloedema. His neurologic examination was normal. Magnetic resonance imaging (MRI) of the brain revealed an ill-defined 40mm contrast-enhancing mass at the genu of the corpus callosum, crossing the midline causing obstructive hydrocephalus. Stereotactic biopsy of the brain tumour was subsequently performed. Microscopically, the tumour was cellular, demonstrated diffuse sheets of malignant cells displaying pleomorphic, hyperchromatic nuclei, some with prominent nucleoli and eosinophilic cytoplasm. Multinucleated bizarre nuclei, geographical necrosis and neovascularisation with glomeruloid formation were noted. Mitotic figures including the atypical forms were also seen. Immunohistochemically, the malignant cells showed diffuse GFAP immunoreactivity and were negative for LCA, CKAE1/AE3, chromogranin and synaptophysin. A diagnosis of glioblastoma, WHO grade IV was rendered. The patient was subjected to maximal debulking surgery followed by adjuvant radiotherapy. Unfortunately, the patient passed away due to intratumoral bleed with cerebral oedema prior to initiation of treatment. *Discussion:* Although rare, glioblastoma should always be considered in the differential diagnosis of a paediatric brain tumour. Given the location of the tumour, histological examination is mandatory to exclude other possibilities, including demyelinating disease, neurosarcooidosis and ependymomas. Even with aggressive treatment strategies, these tumours are associated with a grim prognosis.

A05 - PAEDIATRIC H3K27M-MUTANT THALAMIC DIFFUSE MIDLINE GLIOMA: AN AGGRESSIVE ENTITY NOT TO BE MISSED

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Introduction: Mutation of H3K27M was originally identified in paediatric diffuse intrinsic pontine glioma (DIPG). It was thereafter observed that this mutation is not restricted to DIPG, but in any glial tumours arising in midline locations such as thalamus, brainstem and spinal cord. This novel, genetically-defined entity was coined “diffuse midline glioma (DMG), H3K27M-mutant” in the 2016 World Health Organisation, recognising a distinct set of tumours with aggressive clinical behaviour regardless of histological grading of the tumour. We herein described a near-missed case of H3K27M-mutant in a low-grade thalamic astrocytoma. *Case report:* A previously healthy girl presented with a-week history of involuntary movements affecting her left upper limb. On examination, the patient had unilateral left upper limb chorea and weakness with power score of 3/5. Magnetic resonance imaging (MRI) brain revealed ill-defined 32mm right thalamic tumour with no significant enhancement post contrast. The patient underwent open craniotomy and surgical debulking of tumour. Microscopically, the tumour comprised of proliferation of fibrillary astrocytes displaying mild pleomorphic hyperchromatic nuclei with some eosinophilic cytoplasm. Mitosis is not seen. No tumour necrosis nor microvascular proliferation is apparent. Histological features consistent with diffuse astrocytoma, WHO grade II. Given the midline location of the lesion, additional molecular testing for H3K27M mutation was performed showed positive results, and hence upgraded to WHO grade IV. *Discussion:* Paediatric H3K27M-mutant thalamic DMG portends a dismal prognosis despite a low grade histomorphology. High index of suspicion with appropriate molecular testing for histone gene mutational status for every midline gliomas are keys to arriving at an accurate diagnosis.

A06 - PLACENTAL MESENCHYMAL DYSPLASIA: NOT ALL GRAPES ARE MOLAR PREGNANCY

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Introduction: Placental mesenchymal dysplasia (PMD) is a rare benign disease of the placenta characterized by placentomegaly, dilatation of chorionic vessels with hydropic stem villi, and absent of trophoblastic proliferation. *Case report:* We report this condition in a 34-year-old primigravida requiring early intervention for severe pre-eclampsia at 28 weeks of gestation. Her initial prenatal ultrasound reported placental chorangioma. Gross macroscopic evaluation showed a markedly enlarged placenta, weighing 680 g. The cut surfaces of the placenta showed an admixture of normal-looking parenchyma and multiple clusters of grape-like fluid-filled vesicles measuring up to 25 mm in diameter. The umbilical cord was unremarkable. Microscopic

examination revealed an admixture of normal villi and abnormal-appearing stem villi. The latter showed hydropic change and development of a central cistern. The villi contained thick-walled vessels and trophoblastic proliferation was absent. *Discussion:* PMD have various differential diagnoses which includes hydatidiform mole, chorangioma, inter-villous hematoma, and infarct. PMD is however defined by a distinctive constellation of pathologic features that can be distinguished from other differential diagnoses. It is important for its early antenatal recognition to aid in clinical management of pregnancy outcomes or future pregnancies as it can be associated with increased risk for intrauterine fetal demise (IUID), intrauterine growth restriction (IUGR), and some chromosomal abnormalities.

A07 - A 'GIANT' CHORANGIOMA: AN UNEXPECTED FINDING

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Introduction: Chorangiomas are benign non-trophoblastic vascular lesion of the placenta. Small chorangiomas are usually asymptomatic, but the large or multiple ones may be associated with fetal-maternal complications. We would like to share an unexpected case of a 'giant' placental chorangioma associated with fetal cardiomegaly. *Case report:* The case was a 35-years old lady in her seventh pregnancy with incidental fetal cardiomegaly on ultrasound evaluation at 31 weeks of gestation. She went into premature labour and delivered a female liveborn of 1.5kg via a normal vaginal delivery with Apgar score of 8/9. The echocardiography showed normal heart chambers with no dilatation. The delivered placenta unexpectedly revealed a large 6-cm well circumscribed, solid red-brown firm mass occupying the whole placental thickness, with blood-filled spaces on cut surface. The placenta disc was very large for gestational age with low fetoplacental ratio. Histopathology of the mass confirmed the diagnosis of chorangioma with infarcted changes. *Discussion:* Arteriovenous shunting in large or 'giant' chorangiomas can be associated with fetal complications. The increase venous return to the fetal heart cause cardiomegaly and high output heart failure with oedema and hydrops. Disseminated intravascular coagulopathy, growth restriction and stillbirth are other associated fetal complications.

A08 - LIVER NODULES IN A 16-YEAR-OLD BOY WITH HISTORY OF HEPATOCELLULAR CARCINOMA

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Introduction: We report a case of a 16-year-old boy who presented with right sided abdominal pain, 7 years after he was diagnosed with hepatocellular carcinoma (HCC). *Case report:* A 16-year-old boy was diagnosed with HCC at age 9, and had undergone neoadjuvant chemotherapy and extended right hepatectomy. He presented with intermittent right sided abdominal pain for past 1 month. CT abdomen showed presence of multiple liver masses with lymph node and peritoneal metastasis, and a large bowel mass. Liver nodule biopsy was performed and reported as metastatic adenocarcinoma consistent with colon adenocarcinoma. Subsequent colonoscopy revealed multiple polyps and a tumour. Total colectomy specimen confirmed a stage 4 moderately differentiated adenocarcinoma with presence of more than 100 polyps. *Discussion:* HCC is the third most common paediatric liver tumour and represents up to 20% of all paediatric liver neoplasms. Prognosis is usually poor with a 5-year survival rate of 28%. Prognosis factors include tumour stage, metastasis and complete tumour resection. Tumour recurrence was the initial working diagnosis for this patient in view of the clinical history. However, it was noted that patient also has strong family history of colorectal cancer involving his mother, maternal uncle and maternal aunt. The clinical history and pathological findings are in keeping with an underlying familial adenomatous polyposis (FAP). A risk-stratified approach for disease management should be initiated early. Chemoprevention, colonoscopy surveillance and early surgical referral for young FAP patients with a high risk of polyposis progression may increase survival. Genetic testing for germline mutation should be performed on individuals with positive family history of polyposis.

A09 - A CASE OF MEDULLOBLASTOMA IN A TWIN INFANT DIAGNOSED AT AUTOPSY

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Introduction: Medulloblastomas are embryonal tumours arising in the cerebellum and commonly occur in childhood. They are highly invasive and tend to disseminate early in its course. We would like to share a case of medulloblastoma in a 16-month-old twin boy which was unfortunately diagnosed only at autopsy. *Case report:* The child was a 16-months-old twin boy, who was brought to the Emergency Department for resuscitation, but was however pronounced dead by the attending doctor. The father had noticed his son to be in a breathless state before rushing him to the ED. He was an active child with no recent history of hospital admission. Autopsy revealed a right dorsal cerebellar haemorrhage, with associated brain oedema and ventricular dilatation. Upon fixation, an irregular haemorrhagic cerebellar lesion with necrotic edge was apparent. Tissue sections showed a malignant small round cell tumour arranged in sheets with vague nodular appearance

and numerous mitotic figures. Multiple foci of tumour necrosis and nuclear palisading were seen with prominent vascularity in areas. The malignant cells were immunoreactive to vimentin and synaptophysin, but negative to GFAP. Beta-catenin was not activated. The tumor morphology and immunohistochemistry were consistent with desmoplastic medulloblastoma (WHO Grade IV). *Discussion:* Medulloblastomas are restricted to the midline and cerebellum thus clinical manifestation can be vague especially in young children whose gait is still not established yet. The current molecular classification of medulloblastoma has important clinical implications. The four distinct subgroups demonstrate different demographic, genetic features and prognosis. Familial medulloblastomas in twin siblings have been reported.

A10 - INVASIVE *STREPTOCOCCUS PYOGENES* INFECTION IN UNDIAGNOSED PAEDIATRIC NAFLD WITH COMPLICATING CIRRHOSIS

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Introduction: Non-alcoholic fatty liver disease (NAFLD) is a metabolic disorder with spectrum of disease ranging from hepatic steatosis to steatohepatitis; in which the latter can evolve to cirrhosis and carcinoma. Group A β -haemolytic *Streptococcus pyogenes* (GABHS) is a gram-positive cocci organism, known to produce exotoxins and superantigens leading to bacterial superinfections. We report a case of severe GABHS sepsis in a young adolescent girl with NAFLD and complicating cirrhosis, diagnosed at autopsy. *Case report:* We described a previously well 10-years-old obese girl who was brought-in-dead to mortuary for a post-mortem. She had a 3-days history of fever associated with flu-like illness, worsening lethargy and poor oral intake. Her condition gradually deteriorated with altered mental status and stuporous. Post-mortem microbiology samples isolated GABHS from multiple sites with evident of extensive coagulopathy and multi-organ involvement on tissue histology. There was hepatomegaly and diffuse, severe macrovesicular steatosis with cirrhotic architecture. *Discussion:* Paediatric NAFLD is one of the most common causes of chronic liver disease in children. The immune-compromised state and liver dysfunction may predispose to invasive GBS infections with severe coagulopathy. Early recognition of paediatric NAFLD and appropriate preventive strategies in childhood is necessary to reduce associated morbidity and mortality.

F01 - SUBARACHNOID HAEMORRHAGE COMPLICATING INFECTION IN AN INFANT MASQUERADING AS NON-ACCIDENTAL INJURY

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Introduction: Postmortem findings of intracranial haemorrhage in an infant may point towards nonaccidental injuries, especially if the infant was found dead under the supervision of a caretaker. This might lead to possible legal implication if the cause of haemorrhage is not thoroughly investigated. We report a case of subarachnoid haemorrhage complicating multi-organism infection with possible concomitant liver disease. *Case Report:* A 4 months old male infant was found unconscious at his caretaker home. He was certified as brought in dead to the nearest hospital. He had episodes of loose stool few days prior to his demise. Upon post mortem examination, there were neither dysmorphic features nor external injuries detected. Internally, there were patchy interhemispheric and bitemporal subarachnoid haemorrhage, and the brain was grossly oedematous. The liver and thymus were enlarged. There was no other significant trauma or diseases internally. Histology section of the liver revealed diffuse microsteatosis with prominent extramedullary haematopoiesis. Blood culture and cerebrospinal fluid culture grew *Enterobacter spp.*, *Klebsiella spp.* and *Citrobacter spp.* Body fluids sent for inborn errors of metabolism (IEM) testing was suggestive of liver dysfunction with hyperammonemia and ketosis. *Discussion:* This case illustrates on the importance of thorough investigation of subarachnoid haemorrhage in infants to prevent potential legal implication. The enlarged thymus and prominent hepatic extramedullary haematopoiesis indicate that the infant experiencing a period of stress response prior to his demise. Enteric organisms isolated from cultures are associated with clinical episodes of loose stools, which caused septicaemia with resultant coagulopathy and patchy subarachnoid haemorrhage. The infection hence represents the most likely cause of stress response in this infant. We postulate that deranged IEM results in conjunction with hyperammonemia, hepatomegaly and diffuse microsteatosis strongly indicate underlying liver disease, with IEM as one of the possible diseases that need to be ruled out.

F02 - CHILD HOMICIDE VICTIMS IN JOHOR BAHRU: A 5-YEAR RETROSPECTIVE FORENSIC AUTOPSY STUDY

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Introduction: Paediatric homicide is an important medico-legal phenomenon that never fails to attract public attention. Data on these cases from forensic pathology perspective in Malaysia are limited. This study is aimed to describe characteristics of paediatric homicides in Hospital Sultanah Aminah, Johor Bahru (HSAJB) which is one of the main forensic pathology referral centres in Malaysia. *Materials and Methods:* Retrospective autopsy records analyses of paediatric homicides performed at the Department of Forensic Medicine, HSAJB was undertaken over a 5-year period, from January 2011 to December 2015. The demographic profiles and injury patterns of the victims as well as causes of death were analysed. *Results:* Out of 175 homicide autopsies performed during study period, 12 cases of child homicide were identified. A male predominance was noted among the victims with male to female ratio of 2:1. There were 8 (75%) homicide victims under 5-year of age and mostly were males (63%). Majorities were Malaysian (75%) with highest prevalence among the Indian ethnic group (5 cases). Blunt force (59%) was the most frequent method of injury with head being the most frequently injured body region (56%). This was similar in comparison with homicide cases in adults. Among victims, one case was consistent with filicide while another fit the category of neglect. *Discussion:* Complete and thorough forensic autopsy is necessary to recognize victims of child homicide. As such, this local data analysis offers better understanding of this phenomenon in Malaysia thus helping the investigating authorities including forensic pathologists to identify cases of child homicide.

F03 - DEATH IN CHILDREN RELATED TO VEHICULAR ACCIDENT AUTOPSIED IN HOSPITAL SUNGAI BULOH, MALAYSIA. A CASE SERIES.

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Introduction: According to the World Health Organisation (WHO) around 830,000 children are fatally injured from accidental or unintentional injuries every year. In Malaysia, road traffic accidents becoming more common with the advent of more vehicles on the roads and in such event, unrestrained children are more likely to be fatally injured. The objective of this study is to identify profiles of vehicular death involving children. *Materials and Methods:* Fatalities due to vehicular accident in children over 3 years period from January 2017 until January 2020 were collected for this study. All data were retrieved from Paediatric Death Registration Record of Forensic Medicine Department Hospital Sungai Buloh. The age, ethnic group, gender and cause of death of children presented to Emergency Department as well as brought in dead to Forensic Medicine Department Hospital Sungai Buloh were analysed. *Results:* A total of 17 cases were collected over the study period. Majority of cases involved Malay ethnic group. The mean age group of the victims was 10-year-old with male being the dominant gender. Vehicular occupants contributed 5 cases. Most of deaths were caused by head injury. *Discussion:* Head injury predominates as the cause of death in children related to vehicular accident presented to Hospital Sungai Buloh. A significant number of road traffic fatalities occurred in children who travelled as vehicular occupants. Therefore, this study further supports the need to have restraining devices for safety of children travelling on the road.

F04 - PNEUMONIC SEPSIS AS A COMPLICATION OF VARICELLA ZOSTER VIRUS INFECTION: AN AUTOPSY CASE REPORT

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Introduction: Varicella, also commonly referred to as “chickenpox”, is an acute and highly contagious condition that caused by primary infection with the Varicella-Zoster Virus (VZV). Serious complications from chickenpox may include bacterial, skin and soft tissue infections, meningoencephalitis and coagulopathy. *Case Report:* We report a case of fatal VZV infection with complicating pneumonic sepsis diagnosed at autopsy. A 3-month-old boy had history of small vesicles over ears which subsequently spread to whole body 8 days prior to his death. Eruption of vesicles was associated with fever, diarrhoea and vomiting. His father experienced similar vesicles and was clinically diagnosed with chickenpox one week prior. The boy later collapsed at home and was brought to nearest hospital but pronounced dead upon arrival. At autopsy, widespread ruptured lesions with erythematous base were seen over whole body sparing the abdomen and bilateral anterior lower limbs. Internal examination showed major organ congestion. The brain showed no gross evidence of infection. Histopathology examination of lungs revealed intra alveolar infiltration by inflammatory infiltrates predominantly lymphocytes and histiocytes. Foci of multinucleated cells and organization of necrotic parenchyma were observed in keeping with pneumonia associated with VZV infection. No histological features of meningoencephalitis seen in brain tissues. Laboratory investigations showed positive skin swabs for VZV. Blood and lung tissue culture consistently grew *Staphylococcus Aureus*. The cause of death was attributed to pneumonic sepsis complicating VZV infection. *Discussion:* Pneumonia may complicate VZV infection especially in infants and can cause deterioration and even death. Subtle clinical manifestations should not be overlooked by parents and clinicians to avoid fatal mishap.

F05 - AUDIT ON PAEDIATRIC POST-MORTEM PRACTICE IN FORENSIC DEPARTMENT HOSPITAL SUNGAI BULOH

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Introduction: Paediatric post-mortem examination is a highly specialized post-mortem procedure. It requires detailed techniques with relevant ancillary investigative support. When properly conducted, paediatric post-mortem examination is able to establish cause and manner of death and also highlights the understanding of clinico-pathological correlation of the case. Hence, a standardized post-mortem practice is required in forensic setting to fulfill its targeted roles. *Materials and Methods:* This is a clinical audit on the performance of forensic paediatric post-mortem for under 5 natural death cases presented to Forensic Medicine Department, Hospital Sungai Buloh. A retrospective data analysis was conducted for various ancillary laboratory investigations for 3 months period in 2018. This was followed by a prospective case analysis within equal duration of time in 2019 with introduction of post-mortem checklist as an intervention tool to increase the overall quality of post-mortem examination performed. A standard of eighty percent (80%) was used in this audit. *Results:* A total of 10 cases were collected over both retrospective and prospective audit period. Out of 9 audited investigations, only 2 achieved minimum percentage standard during pre-intervention period. Following checklist intervention, 8 out of 9 investigations achieved percentage standard. *Discussion:* The implementation of a checklist has proven to increase performance standard in forensic paediatric post-mortem. This creates awareness and guidance among prosecutors which further improve standard of post-mortem practice and its overall outcome.

F08 - A CASE OF PAEDIATRIC SUDEP

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Introduction: Sudden unexpected death in epilepsy (SUDEP) is rare in children. It can only be established with autopsy examination and medical history of epilepsy. SUDEP can still go unrecognised with 'unascertained' categorical cause of death. However, there are significant post-mortem findings more often seen in SUDEP. We report an eleven-year-old SUDEP with these findings. *Case Report:* The child was found unconscious in bed at night with foamy saliva around his mouth. No witness as to whether there was prior episode of seizure or status epilepticus. He was a known case of neonatal epilepsy and was on treatment since age of five. There were documented evidence of non-compliance towards medication and follow-up. Autopsy examination revealed tongue bite marks. The brain showed oedema and congestion, with jelly-like consistency of left temporoparietal cortex. Brain tissue examination revealed multifocal infarct with organizing features. No definite features of acute encephalitis were observed. Both thyroid and adrenals were small and hypoplastic. No other significant pathologies or injuries detected. Toxicology analysis was negative for drug misused. *Discussion:* Recognised risk factors of SUDEP include early onset of epilepsy, long disease duration and poor compliance to medications. SUDEP are often unwitnessed, nocturnal deaths and no cause of death can be ascertained at post-mortem. A diagnosis of SUDEP requires a good clinical history of epilepsy, relevant circumstances of death and detailed autopsy investigations including extensive histopathological analysis.

F09 - SUDDEN INFANT DEATH SYNDROME – A VOID IN THE MEDICAL WORLD

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Introduction: The initial definition of sudden infant death syndrome was proposed by Dr J.B. Beckwith in 1969, which was as follows: 'the sudden death of any infant or young child which is unexpected by history and in whom a thorough necropsy fails to demonstrate an adequate cause of death'. The latest definition was proposed in 2004, along with sub-classifications which comprise four categories based on previous history, circumstances of death, and autopsy findings. *Case Report:* This is a case of a 4-month-old female baby who was put to sleep after an early morning feed, and was later found lifeless in its sleeping place. There was a history of contact with relatives who had just recovered from apparent upper respiratory tract infection, and the baby did not develop any symptoms. Autopsy was largely unremarkable apart from minimal bilateral pleural effusions and slightly heavy lungs. Though the lung culture samples grew few organisms, the histopathological examination found no evidence of inflammation. The histopathological examination also found focal fibrosis at the endocardium of the heart, which is considered not significant in the causation of death. *Discussion:* The cause of death is still unascertained after postmortem examination. From the history, circumstances of death, and autopsy findings, this case can be regarded as a sudden infant death syndrome. However, it cannot be concluded as a true sudden infant death syndrome because of abnormal findings in the heart and respiratory system, which, albeit not significant, suggests the possibility of an as-yet unknown ongoing pathology.

F10 - ON THE HORNS OF A DILEMMA – INFECTION VS TRAUMA IN AN INFANT: AN AUTOPSY CASE REPORT

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Introduction: Childhood meningitis is associated with significant morbidity and mortality. Globally, it causes more deaths in children under 5 years old than malaria. Paediatric head traumas, on the other hand, are mostly minor. Serious head traumas in infants are, nonetheless, largely related to child abuse. When both natural disease and trauma are seen in a non-mobile child, the question arises as to the order of occurrence and their significance, which includes the manner of trauma infliction. *Case Report:* A 4-month-old Rohingya baby boy was brought to a hospital with an acute onset of focal scalp swelling and irritability, associated with upper respiratory tract symptoms and fever. Radiology imaging showed a skull fracture, and features suggestive of acute meningitis. Unfortunately, the child's condition deteriorated and death ensued the day after admission. A forensic autopsy, which was performed in view of the possibility of a non-accidental injury, showed a linear parietal bone fracture with minimal extradural haematoma, turbid subdural effusion and cerebral oedema. Neuropathology examination confirmed the presence of well-established acute meningitis, which was estimated to be older than the fracture. *Discussion:* The presence of both natural disease and trauma can be perplexing, requiring detailed analysis to determine their potential roles in causing or contributing to death, if at all. Postmeningitis trauma, although not unheard of, is probably not thoroughly discussed in the literature. Its existence can be misleading, even if proven to not be fatal. Other equally important issues pertaining to the case shall be discussed.

F11 - A CHILD CALLED "IT". AUTISM, BATTERED CHILD SYNDROME AND NEGLECT

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Introduction: Battered child syndrome is defined as all forms of violence, prejudice or physical and mental abuse, carelessness or neglect inflicted on the child while under the care of the parents, close relatives or any other person exerting physical and/or intellectual superiority. *Case Report:* A 9-year-old Chinese boy with autism and a history of repeated self-inflicted injuries was brought in dead by his babysitter to the hospital. An autopsy on the child showed multiple blunt trauma on the head, face and chest with evidence of negligence in seeking medical attention. *Discussion:* Before labelling a case as "battered child syndrome" it should be thoroughly investigated and all the possibilities of accidental injury need to be ruled out so as to avoid unnecessary harassment of the innocent. Forensic pathologists are faced with complex analyses and decisions related to what is and what is not child abuse. However, certain conditions have been considered hallmarks of child abuse. Such pathognomonic conditions have led to an inevitable diagnosis of inflicted injury. Supported by histology examination and inconsistency in history by family members or relatives can add information and corroboration of evidence for a better interpretation of such injuries. Unfortunately, the damage as a result of physical, mental or sexual abuse and neglect can be irreversible, and can even be fatal.

F12 - UNEXPECTED MENINGOENCEPHALITIS IN A CHILD DUE TO MELIOIDOSIS WITH UNDERLYING THYMIC HYPOPLASIA

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Introduction: Whitmore's disease or melioidosis is an important neglected tropical disease caused by *Burkholderia pseudomallei* with multiple organ involvement. The CNS melioidosis usually affects adults with underlying chronic illness such as diabetes mellitus. We report an unexpected case of CNS melioidosis in a child with meningoencephalitis at autopsy. *Case Report:* The child was a 2.5-year-old boy, who had 3 weeks history of fever prior to his death. He had been prescribed and treated with antibiotic. Unfortunately, he was found to be unresponsive, brought to the nearest emergency but succumbed despite resuscitation. Further history revealed episode of hallucination prior to death. The autopsy findings disclosed a turbid cerebrospinal fluid (CSF) with adherent greenish-yellowish exudate on the brain with adjacent parenchymal involvement. The thymus was only identified in histological section with hypoplastic features. Microbiological investigations isolated *B. pseudomallei* from the brain tissue and CSF cultures. The blood culture did not yield any growth and PCR for melioidosis from blood culture bottle was negative. Lung and pleural fluid cultures revealed no growth. *Discussion:* The *B. pseudomallei* is endemic in Southeast Asian countries and can be easily isolated from the environment. Human acquires this potentially fatal infectious disease by inhalation, ingestion or inoculation of the bacterium from the contaminated soil or water. CNS melioidosis in a child is rare and the most common manifestation is meningoencephalitis. However, in view of hypoplastic features in the thymus, the possibility of an underlying primary immunodeficiency in this child could not be entirely excluded in certainty.

F13 - INTRAMYOCARDIAL CORONARY ARTERY DYSPLASIA – A RARE ENTITY PRESENTING AS SUDDEN UNEXPECTED DEATH IN A CHILD

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Introduction: Coronary fibromuscular dysplasia is a rare cause of sudden death in childhood and infancy. We present an autopsy case with this entity. *Case Report:* A 1-year and 9-month-old unimmunized male child of Bajau ethnicity presented with a history of fever, lethargy and reduced feeding for two days. He was found unresponsive in the morning and was brought in dead. Autopsy revealed a well-nourished male child with no injuries. Internal examination exhibited minimal serous pleural and pericardial effusions. No obvious gross pathology was noted. Histology of the heart revealed intramural arteries displaying a variable degree of irregular thickening and thinning of the tunica media with loose fibrous proliferation, with some exhibiting areas of fragmentation of the internal elastic lamina and narrowing of the arterial lumina. Focal myocardial fibrosis is also seen. *Discussion:* The cause of death was ascribed to sequelae of intramyocardial coronary artery dysplasia. This condition has been reported in cases of hypertrophic cardiomyopathy and mitral valve prolapse but can occur independently. Its aetiology is poorly understood, but it is generally accepted to be multifactorial with varying contributions from genetic, hormonal and environmental influences. Mechanism of death is likely ventricular tachyarrhythmia.

F14 - THE LAST DANCE

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Introduction: Sudden death attributed to primary cardiac neoplasms in the paediatric population are extremely rare. *Case Report:* This report presents a case of a 4-year-old female child with no known co-morbidities, who died en-route to a hospital in Kota Kinabalu, Sabah. Just moments prior to her collapse, she had been well and dancing in the living room. At autopsy, no injuries were seen. Cardiac examination revealed a solitary, white, firm and well circumscribed mass arising from the anterolateral wall of the left ventricle. This bulging mass was compressing the left ventricular chamber. The interventricular septum and right ventricular walls were spared. Histologically, the tumour showed proliferation of monomorphic fibroblasts infiltrating into cardiac muscle. The rest of the autopsy was unremarkable. *Discussion:* Cardiac fibromas are the second most common paediatric cardiac tumours. They arise approximately five times more frequently in the left ventricle than the right ventricle. Despite the histologically benign nature of cardiac fibromas, large cardiac fibromas can run a malignant course. They can result in hemodynamic and conductive abnormalities, culminating in sudden death. Paediatric patients also have a smaller heart and high tumour-to-heart ratio compared to adults, thus generating low cardiac output leading to poor outcomes. Surgical resection of large cardiac fibromas is associated with excellent long-term survival, if detected early.

F15 - FATAL HYPEREOSINOPHILIC OBLITERATIVE BRONCHIOLITIS SYNDROME

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Introduction: Eosinophilic lung diseases are a heterogeneous group of disorders characterized by abnormally increased numbers of eosinophils within the pulmonary airways and parenchyma. Hypereosinophilic obliterative bronchiolitis syndrome (HOBS) is a characteristic entity among the eosinophilic respiratory disorders deserving its own spotlight. *Case Report:* A 1-year and 8-month-old unimmunized Suluk female child, presented with a 3-day history of cough and shortness of breath. She had an uneventful birth, and there was no history of atopy, asthma or any hospital admissions for respiratory complaints. She passed away shortly after arrival to the Emergency Department. Autopsy revealed marked pulmonary oedema with consolidation of the lungs. The rest of the internal organs appeared normal. Pulmonary histopathology showed many bronchioles infiltrated by dense eosinophils associated with lymphocytes and plasma cells. No definite inflammatory infiltrates are seen in the alveolar spaces. The interstitium shows mild to moderate mixed inflammatory cells composed of lymphocytes, plasma cells, neutrophils and eosinophils. *Discussion:* We report a case of fatal HOBS in the absence of lung parenchymal involvement in a child. Its role in death in children has not been established in the literature. It may be idiopathic, with a similar presentation also encountered in patients with asthma, allergic bronchopulmonary Aspergillosis or drug induced.