(UVC), umbilical arterial catheter (UAC) and Peripherally Inserted Central Catheter (PICC).

The infant developed recurrent abdominal distension, associated with bilious aspirates and vomits. On examination, the abdomen appeared tense and shiny, with dilated veins. Necrotising enterocolitis (NEC) was suspected and enteral feeds were held repeatedly. Plain film abdominal x-rays revealed bowel distension. However they did not identify other radiological features of NEC or perforation, such as pneumatosis intestinalis or pneumoperitoneum.

Coagulation screens were normal. On Day 36, the infant's clinical condition rapidly deteriorated. She developed a grossly distended abdomen, associated with increased oxygen requirement and desaturations. She required ventilation, inotropic support and transfer to a tertiary centre. She continued to deteriorate and further treatment was considered futile. Following discussion with her parents, palliative care was introduced and she passed away shortly afterwards.

Subsequent postmortem examination revealed idiopathic superior mesenteric vein thrombosis.

Discussion A differential diagnosis for neonatal abdominal distension and bilious vomiting includes necrotising enterocolitis (NEC), intestinal malrotation and volvulus.³ Superior mesenteric vein thrombosis causes chronic, recurrent and progressive devitalisation of the small bowel wall. It is associated with pre-terminal neutropaenic sepsis and peritonitis.⁴ It may be caused by an unidentified congenital thrombophilia.⁵ Conclusion In refractory cases of suspected NEC, venous thromboembolism should be considered. Abdominal x-ray findings are non-specific and are unlikely to contribute to a correct diagnosis. More specific investigations include Doppler ultrasound and CT angiography.⁶

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127

CRAZYTAXY: CASE REPORT OF HETEROTAXY SYNDROME WITH POLYSPLENIA

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Introduction Heterotaxy syndrome is a rare congenital defect. It affects the anatomical position and function of visceral organs. Its clinical signs and symptoms are highly variable.¹ Antenatal and postnatal investigations and management should be tailored to each individual.

Case Antenatal ultrasound at 13 weeks' gestation suggested total situs inversus. At 21 weeks, ultrasound revealed a mid-line liver, a right-sided stomach and left atrial isomerisation. Antenatal foetal echocardiogram confirmed an azygous continuation of the inferior vena cava. Heart structure was otherwise normal.

The female infant was born at 39+3 weeks by elective C-section. She did not require neonatal resuscitation. She was admitted to NICU and kept NPO, pending further investigations.

Abdominal ultrasound confirmed a midline liver and gall-bladder. The stomach and multiple splenules were visualised in the right upper quadrant. An upper GI contrast revealed intestinal malrotation, with no evidence of obstruction. A blood film identified Howell Jolly bodies. ECG showed normal sinus rhythm. ECHO displayed a small VSD and confirmed antenatal echocardiogram findings.

Following consultation with the Paediatric Surgery team, enteral feeds were introduced on Day Two. Phenoxymethylpenicillin was prescribed indefinitely, on the advice of Paediatric Immunology. The patient was discharged on Day Eight. Out-patient follow-up is planned with Neonatology, Cardiology and Immunology.

Discussion Situs inversus is genetically heterogenous, with variable inheritance patterns. A differential diagnosis should include Heterotaxy Syndrome and Kartagener's Syndrome (primary ciliary dyskinesia).² Antenatal echocardiogram identifies potentially life-threatening cardiac anomalies. Some neonates may require pacemaker insertion for congenital heart block.³ Serial antenatal ultrasound is recommended to exclude hydrops fetalis.

Abdominal ultrasound and blood film are essential to assess splenic function. Asplenia or polysplenia spleen poses a higher risk from encapsulated organisms, such as Streptococcal pneumoniae. Lifelong phenoxymethylpenicillin may be necessary to prevent sepsis or meningitis.⁴ Conclusion Heterotaxy Syndrome is rare, complex congenital disorder. Antenatal investigations are essential to determine foetal viability and inform neonatal management. Neonates require an array of postnatal investigations and may require long-term subspecialty follow-up.

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128

CLAMPING MY STYLE: CASE SERIES OF RECURRENT NEONATAL BLOOD TRANSFUSIONS ASSOCIATED WITH IMMEDIATE CORD CLAMPING

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Introduction Neonatal resuscitation guidelines routinely recommend delayed cord clamping.¹ This recommendation is applicable to preterm neonates, provided they are born vigorous and crying. It is associated with increased haemoglobin, preventing neonatal anaemia.² Failure to delay cord clamping may necessitate recurrent neonatal blood transfusions.³ Delayed cord clamping reduces the risk of parenteral nutrition associated liver disease, necrotising enterocolitis, and intra-ventricular haemorrhage.⁴ Case Series Two extremely premature neonates were born by spontaneous vaginal delivery, at 23+4 and 26 weeks respectively. Prior to delivery, the neonatal team requested delayed cord clamping. Both infants cried spontaneously and were vigorous at birth. At 1 minute, APGAR scores were 6 and 8 respectively. However both umbilical cords were immediately clamped. The first infant required five red cell transfusions during his neonatal admission. He developed necrotizing enterocolitis, managed medically. He had two episodes of suspected late-onset sepsis. Cranial ultrasound revealed a left-sided Grade 3 intraventricular haemorrhage. The second neonate required three red cell transfusions during her NICU admission. She developed parenteral nutrition associated liver disease. This was characterized by an elevated direct bilirubin. She also developed *Klebsiella pneumoniae*.

Discussion Non-adherence to delayed cord clamping may cause chronic anaemia in preterm neonates. Multiple transfusions compound the risk of acute transfusion-related reactions. These include fever, haemolysis and anaphylaxis. Transfusions are an independent risk factor for parenteral nutrition associated liver disease. Transfusions also have an immunosuppressive effect, increasing the risk of pneumonia and late onset neonatal sepsis. Transfusion-related alloantibodies increase the lifelong risk of organ transplant rejection. Delayed cord clamping is associated with a decreased risk of intraventricular haemorrhage. Among four-year-old children, it is correlated with improved fine motor and social development.

Conclusion Blood transfusions in preterm neonates should be avoided where possible.

Delayed cord clamping provides a practical, non-invasive method to prevent neonatal anaemia and transfusions. Clinical knowledge and communication between neonatal and obstetric teams is fundamental to optimising patient care.

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129

INTRA-ABDOMINAL COMPARTMENT SYNDROME COMPLICATING POSTOPERATIVE GASTROSCHISIS NEONATE – A LEARNING LESSON

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Introduction Abdominal compartment syndrome (ACS) is a known complication of abdominal wall defect repair which needs vigilant monitoring. Here we emphasise bladder pressure monitoring system as one of the tools for early detection of ACS.

Case Summary This was a term baby with an antenatal diagnosis of gastroschisis born by elective caesarean section. The baby was born in good condition and the abdominal contents were covered with a plastic bag to prevent fluid and heat loss, and a nasogastric tube was passed. The baby was taken to theatre within a few hours of birth for surgical repair. Intraoperative findings included the stomach, small and large bowel being outside of the abdominal cavity.

In view of the repair being under moderate tension, bladder pressure monitoring for ACS was instituted using an indwelling catheter and standard pressure transducer. Over the following 12 hours, the bladder pressure gradually increased from a baseline of 8-10 mmHg to 24 mmHg. This was accompanied by oliguria, elevated lactate, a wide toe-core temperature gap and high ventilator pressure requirement to achieve the target tidal volume.

Interestingly, the abdomen remained non-tender for a significant time period, which delayed early suspicion of ACS. But with worsening metabolic acidosis and increasing bladder pressure reading decision was made to take baby to theatre for laparotomy. Following decompressive laparotomy, the baby's clinical condition improved and observation parameters stabilised.

Discussion Gastroschisis is defined as a defect in the abdominal wall resulting in evisceration of abdominal contents. Its incidence is reported as around 1.35 per 10,000 total birth in England and Wales as per Tan et. Risk factors include young maternal age and maternal cigarette smoking, alongside certain medications and maternal genitourinary infections.

ACS can occur as a rare complication of surgical repair of gastroschisis, and can result in intestinal and renal ischaemia. As per Akhobadze et al sustained intra-abdominal pressure (IAP) of greater than 20 mm of Hg is defined as abdominal compartment syndrome.

Intravesical pressure monitoring is recommended by the World Society for Abdominal Compartment Syndrome (WSACS) as the most reliable technique for IAP measurement.

Clinical staff working in surgical neonatal unit should be aware of sensitivity of Intrabdominal pressure monitoring system over clinical signs of ACS.

Conclusion Abdominal signs may not appear in early abdominal compartment syndrome.

Intraabdominal pressure monitoring is important for early diagnosis of abdominal compartment syndrome.