Necrotising Enterocolitis

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Case Report

B/o A R, a male baby born to a G2A1 30 yr old mother at 34+2 weeks of gestation by emergency Caesarean section in view of doppler abnormality on 06/02/2020 at 11:35 am. TIFFA was normal.

Baby cried immediately after birth, Apgar - 8/10 at 1 min and 9/10 at 5 min of life, initial examination was normal. Birth weight - 1.604 Kg. Baby was shifted to NICU for premature and IUGR care.

Course in the NICU: Baby was nursed in the thermoneutral environment.

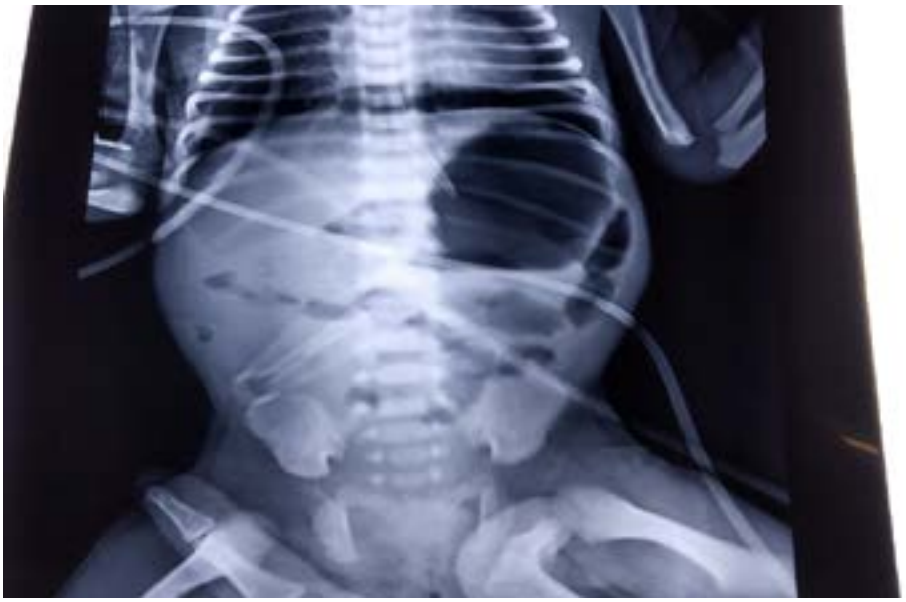
Hypoglycaemia: GRBS at 1 hour of life was low (22 mg/dl), hence baby was given oral paladay (Preterm formula) feeds. As the repeat GRBS was even low (30mg/dl) and the baby also had jitteriness, baby was given 10 % Dextrose bolus and continued continuous infusion to maintain a GIR of 6 mg/kg/min. Further GRBS were stable.

Suspected sepsis: Baby was started on started on IV antibiotics after sending blood c/s (06/02/2020), which was sterile after 48 of incubation. Baby was given IV Ampicillin and Gentamicin for 3 days.

DOL-3: Sepsis/ NEC: Baby was dull and developed feed intolerance in the form of significant bilious aspirates on DOL-2.

CBP showed leucopenia and thrombocytopenia, hence baby was started on IV Cefotaxim (3), Amikacin (3 days) and Metronidazole (14 days) after sending repeat blood c/s (09/02/2020) which was sterile after 1 week of incubation. Abdominal X-ray (09/02/2020) showed dilated gas filled bowel loops and pneumoperitoneum. Stool occult blood was negative. Baby was kept NPO and was managed conservatively. Repeat CBP showed further leucopenia and thrombocytopenia. CRP was 90mg.dl, hence IV antibiotics were upgraded to IV Meropenem and Vancomycin, which were given for total of 14 days. Repeat AXR (11/02/2020) worsened and was suggestive of intestinal perforation.

Baby was hemodynamically stable and was electively intubated and mechanically ventilated. Baby underwent exploratory laparotomy and resection of the gangrenous proximal ileal segment of 10 cm was done with ileostomy (11/02/2020) at bedside in the NICU with all strict aseptic precautions.



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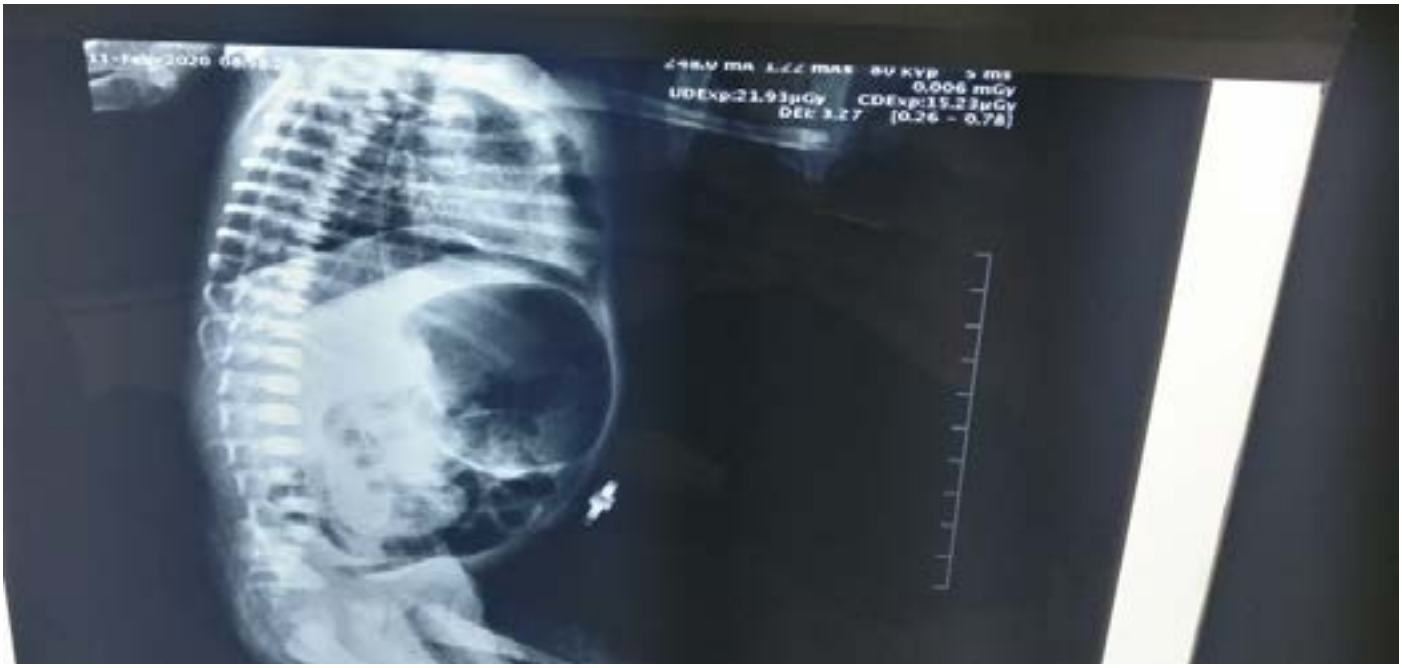

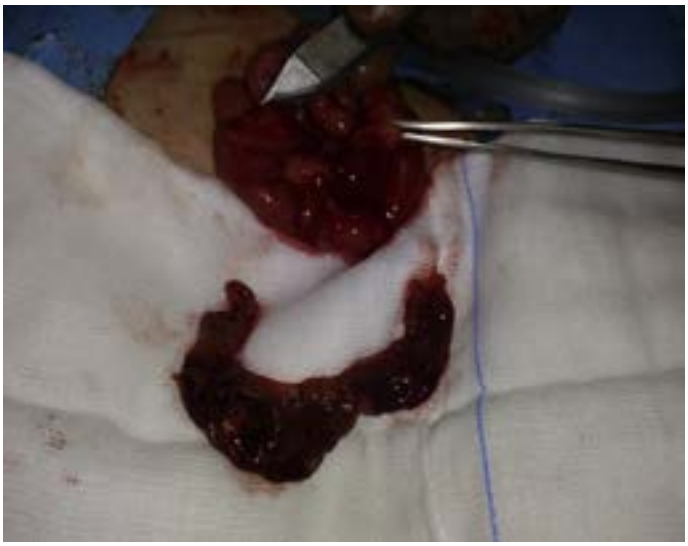

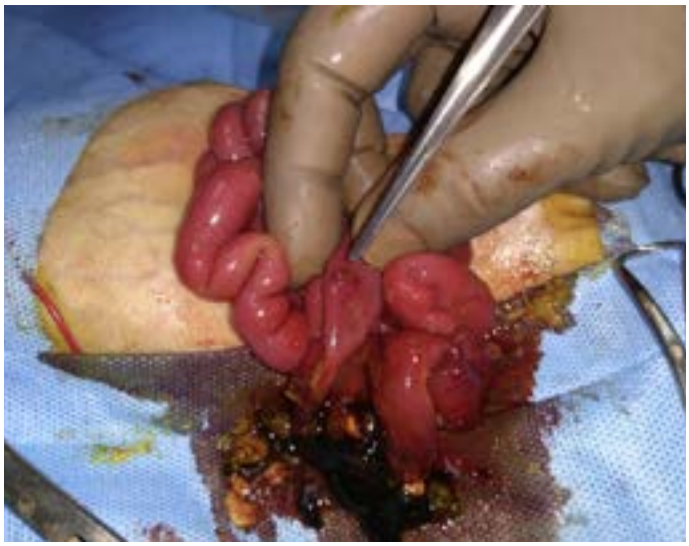

Post-operatively baby required PRBS, SDP and FFP transfusion. Baby was extubated to HFNC (12/02/2020) and then to room air the next day. Baby was kept NPO for 7 days and was started on TPN through PICC line (placed on 1/02/2020). Baby was gradually started on expressed breast milk through OG tube followed by paladay feeds with MMF fortification and protectis drops. As the baby improved and was tolerating full paladay feeds, baby was shifted to mother side after 19 days of NICU stay. Baby was started on Vitamin D3 and multivitamin drops [1-5].

DOL-17: Line infection: PICC line was removed after 10 days of placement. Tip for c/s was sent and it showed growth of E-coli which was sensitive for Meropenem and hence repeat blood c/s was sent, CBP showed leucocytosis and normal CRP. Baby was restarted on IV meropenem, which was stopped after the blood c/s was sterile.

DOL-22: Baby was hemodynamically stable, vitals - normal, discharge weight - 1.773 Kg (169 gm increase since birth), Head circumference - 35 Cm (normal), Length - 47Cm (normal). Baby was exclusively on breast milk. Parents were trained for ileostomy care and the baby was discharged home.

Diagnosis:

PRE-TERM (34+2 weeks)/ SGA/ IUGR/ MALE

NECROTISING ENTEROCOLITIS - STAGE 3B

S/P EXPLORATORY LAPOROTOMY AND PROXIMAL ILEAL RESECTION AND ILEOSTOMY.

SYMPTOMATIC HYPOGLYCEMIA

Follow up visits:

Newborn screening and hearing screening were normal. Baby received vaccinations as per schedule and was upto date. Baby was growing over the lower centiles and with age-appropriate developmental milestones.

Ileostomy closure at 8 months of age:

As the baby was 6.336 Kg, elective ileostomy closure was done. Surgery was uneventful and the baby was started on oral fluid on POD-5, given IV antibiotics for 5 days. As the baby was accepting semi-solid diet, tolerating well with normal bowel movements, he was discharged after 7 days of hospital stay.

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