Letters to the Editor

Hemoperitoneum—A Rare Manifestation of Early Hemorrhagic Disease of Newborn

The incidence of early hemorrhagic disease of newborn (HDN) has declined to a great extent after the routine prophylactic administration of vitamin K(l-3). The bleeding in HDN can be intraluminal-gastrointestinal, intracranial, nasal, subgaleal, ecchymotic spots on skin surface or as a result of circumcision(2,4,5). However, we report a rare and interesting manifestation of HDN presenting only as hemoperitoneum(2).

A normally delivered term male child weighing 2.49 kg was referred from a District Hospital to our institution on the fifth day of life with a history of difficulty in respiration, refusal to feed, and increasing pallor for the last two days. This child was a breastfed baby, who had no history of bleeding from any site, had received two fresh blood transfusions at the District Hospital for severe anemia. The baby was received in the Emergency Room in a gasping condition with severe anemia and marked tachycardia. There was abdominal distension but no palpable lump or any other general or systemic abnormalities. The hematological revealed a Hb of 3.5 g/ dl, PT of 1 min 30 sec (control 13 sec.) and PTTK of 3 min 45 sec (control 45 sec). The total platelet count, serum bilirubin and peripheral smear were within normal limits. A diagnostic peritoneal tap revealed fresh unaltered blood. A platelet count, PT and PTTK were performed to rule out hemophilia trait in mother, which were normal and there was no ABO/Rh incompatibility. The maternal history was not suggestive of phenytoin, phenobarbitone or anticoagulant drug ingestion. The baby was treated with two fresh blood transfusions and 2mg intravenous vitamin K was given immediately and was repeated after 48 hours.Post transfusion Hb increased to 11.5 g/dl, PT returned to normal while PTTK was still marginally prolonged (1 min 10 sec). The baby improved progressively and was discharged on the tenth day.

The clinical presentation of this baby made us suspect a diagnosis of either bleeding diathesis, severe hemolytic anemia, bone marrow suppression, DIC or an intra-abdominal visceral leak into the peritoneum. Bone marrow suppression was ruled out by a normal TLC, total platelet count and peripheral blood smear examination; hemolytic anemia was ruled out by the absence of splenomegaly and icterus while a normal total platelet count excluded DIC. Decreased Hb, prolonged PT and PTTK pointed towards a bleeding diathesis and distended abdomen gave a probable clue to the site of hemorrhage. The non availability of a portable ultrasound machine precluded initial confirmation of our diagnosis. This was confirmed on the third day by a peritoneal tap when a significant amount of fresh blood was aspirated. In such situations until a high degree of suspicion is maintained it may be difficult to establish a diagnosis. We feel that routine prophylaxis by vitamin K keeds to be continued for prevention of early HDN.

B.D. Gupta,
ManishParakh,
R.B. Sharma,
Department of Pediatrics,
Regional Institute of Maternal and
Child Health, Umaid Hospital,
Dr. S.N. Medical College, Jodhpur.

REFERENCES

1. Goorin AM, Cloherty JP. Bleeding. *In:* Manual of Neonatal Care, 3rd edn. Eds. Cloherty JP, Stark AR. Boston, Little Brown and Company, 1991, p 347.
2. Singh M. Care of the Newborn, 4th edn.

New Delhi, Sagar Publications 1991, pp 267-268.

3. Lane PA, Hathway WE. Vitamin K in infancy. J Pediatr 1985,106: 351-359.

4. Barness LA. Hemorrhage in the newborn infant. *In:* Nelson Textbook of Pediatrics, 14th edn. Eds. Behrman RE, Kleigman RM. Philadelphia, W.B. Saunders Company, 1992, pp 48.

5. Pramanik AK. The bleeding neonate. *In:* Medical Emergencies in Children, 2nd edn. Ed. Singh M. New Delhi, Sagar Publications, 1993, p 105.