Gastrointestinal bleeding due to idiopathic early onset of vitamin K deficiency bleeding in a girl baby 50 min after birth: a rare case

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Abstract

Background: The incidence of early-onset vitamin K deficiency bleeding (VKDB) in at-risk neonates who did not receive vitamin K supplementation varied from 6 to 12%. This case report aims to show that VKDB can occur abruptly after birth despite vitamin K1 1 mg IM being given immediately after birth.

Case presentation: A term female baby was born through vaginal delivery of a 28 years old mother, G1P0A0, 39–40 weeks gestation with normal APGAR score, and birth weight was 3445 g, birth length was 52 cm. During pregnancy, the mother did not take any drugs except vitamins. There are no abnormalities on the baby's physical examination. The anus is patent. Immediately after birth, the baby received a vitamin K1 1 mg intramuscularly. Abruptly, 50 min after delivery, there was meconium with lots of fresh blood. Laboratory results showed hemoglobin, 19.6 g/dL; leukocytes, 25,010/uL; platelets, 390,000/uL, with increased PT and aPTT. A peripheral blood smear showed a normal blood morphology. When 7 h old, the baby had much hematochezia. Laboratory results showed decreased hemoglobin to 17.5 g/dL and increased PT, aPTT, and INR. No abnormalities were found on the babygram and abdominal ultrasound. The working diagnosis was gastrointestinal bleeding due to idiopathic early-onset VKDB. The baby received vitamin K1 2 mg IM, Fresh Frozen Plasma, and a Packed Red Cells transfusion. The patient returned home in good clinical condition.

Conclusion: Vitamin K1 1 mg IM prophylaxis should be given immediately after birth to prevent early-onset VKDB. In addition, pregnant women who receive drugs that interfere with vitamin K metabolism (anti-epileptic drugs, antituberculosis drugs, vitamin K antagonist drugs) should be given prophylactic vitamin K1, 20 mg/d orally, for at least two weeks before the expected time of delivery.

Keywords: Gastrointestinal bleeding, Vitamin K deficiency bleeding, Early-onset, Idiopathic, Case report