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Intrauterine toes gangrene in a neonate

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We present a case of a 3-day-old girl with intrauterine gangrene of the left foot toes. The patient was the third live child of a 27-year-old woman with a history of two previous abortions without a definitive cause. Her pregnancy was uneventful except for hypertension and thrombocytopenia detected at the delivery time. There was no history of proteinuria, gestational diabetes mellitus, infections, or drug consumption during pregnancy. Prenatal sonography showed a normal uterus shape with adequate amounts of amniotic fluid and a single normal fetus. The baby was born at the 37th week of gestation with good Apgar scores (9 and 10 at 1st and 5th minutes) by normal vaginal delivery with vertex position. Her growth indices were: weight 2600 grams (10th percentile), length 45 centimeters (3rd percentile), and head circumference 33 centimeters (50th percentile).

Physical examination revealed gangrene of the second and third toes (Fig. 1A) with no other apparent abnormalities. The patient appeared well and had no signs of lethargy or poor feeding. Her vital signs were stable. Blood culture and CRP were negative. Laboratory data showed PT 13, PTT 35.6, INR 1.15, and platelets 30000/mm3. Antithrombin 3, protein C, and S were within normal ranges for neonates. Doppler ultrasonography of the leg and foot was normal. Enoxaparin and fresh frozen plasma were started for her, and amputation of two toes (Fig. 1B) was done. She was discharged in good condition five days after the operation.

Figure 1: A) Gangrenous toes. B) After amputation.

Numerous risk factors may contribute to intrauterine gangrene that includes prematurity, gestational diabetes, gestational hypertension, oligohydramnios, placental abruption, polycythemia, dehydration, congenital heart disease, twin-twin transfusion syndrome, abnormal fetal presentation, coagulation abnormalities, trauma, amniotic band, and thromboembolic events. [1-3] Cissouma et al. reported a preterm neonate with hand cyanosis, gangrene, anemia, and sepsis at birth. She was a product of a twin pregnancy and the other sibling was stillbirth. She was treated with antibiotics, and

amputation was performed. [4] Seker et al. reported a premature infant with tetralogy of Fallot who had lower extremity gangrene at birth. [1] In our case, the only possible risk factor was maternal gestational hypertension. Management of intrauterine gangrene includes maintenance of hemostasis, thrombolytic agents and anticoagulants, prevention of infection, and amputation when necessary. [1, 5] Timely intervention can significantly improve the patient's outcomes.

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