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SIRENOMELIA: A UNIQUE CONGENITAL ANOMALY (CLINICAL CASE)

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Abstract

Sirenomelia (Mermaid Syndrome) is a congenital malformation characterized by partial or complete fusion of the lower limbs and is often associated with pelvic bone anomalies, absence or underdevelopment of external genitalia, absence of the anus, and renal agenesis or dysgenesis. Although this syndrome is generally incompatible with life due to its frequent association with congenital visceral anomalies, there have been rare reported cases of newborns who have survived, though typically with a very short lifespan. Approximately 300 cases have been described in international medical literature, 15% of which are associated with twins, most often monozygotic. We present a sporadic case of sirenomelia in a 30-year-old Indian pregnant woman whose pregnancy was unsupervised (she did not attend prenatal consultations). In our case, premature labor began at 27 weeks of gestation. Ultrasound examination diagnosed intrauterine fetal death, malformation of the lower limbs, and oligohydramnios. After delivery, it became clear that we were dealing with a stillborn male fetus exhibiting features characteristic of sirenomelia. According to radiological examination results, all bony elements of the fetus's lower limbs were present. In studying the case, the theory of vascular steal was identified as a possible pathogenic basis. According to this theory, the changes comprising mermaid syndrome result from circulatory disturbances in the lower part of the fetus's body due to the presence of a single umbilical artery. To our knowledge, this is the first such case reported in Armenia. **Conclusion.** Sirenomelia is an extremely rare and lethal congenital defect. It becomes evident that diagnosis becomes increasingly difficult as gestation progresses, which underscores the importance of regular prenatal visits for the early detection of sirenomelia and other anomalies. An important component of diagnosis is also Doppler examination of umbilical vessels, since the presence of a single umbilical artery often underlies the pathogenesis.

Keywords: *sirenomelia, mermaid syndrome, rare defect, single umbilical artery, oligohydramnios*

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