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DUODENAL ATRESIA IN NEONATOLOGY: A CASE REPORT

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INTRODUCTION

Congenital anomalies of the gastrointestinal tract occur when any portion of the gastrointestinal tract is affected, from the esophagus to the anus. Duodenal atresia is one of these manifestations, the third most common, and its incidence is estimated to be 1 in every 5,000 to 10,000 live births, affecting both sexes equally. It is characterized by failure to recanalize the duodenum after the seventh week of pregnancy and is correlated with genetic factors or some intrauterine ischemia. Its association with other anomalies is quite common, and can affect the renal and cardiac systems, abnormalities in the biliary tract, vertebral, mandibulofacial, and, mainly, a strong relationship with Down Syndrome, present in 25% to 50% of cases. Clinical manifestations can be observed in the prenatal period, through obstetric ultrasound, showing polyhydramnios, due to the inability to absorb amniotic fluid, and the double bubble sign, facilitating early diagnosis. In the neonatal period, the most common symptoms are bilious vomiting, abdominal distension and difficulty in feeding, progressing to malnutrition in the newborn. After clinical stabilization of the patient, definitive treatment is surgical and depends on the type of obstruction found. The postoperative prognosis is favorable in most cases, but factors such as late diagnosis, low birth weight, infections, non-preservation of the ileocecal valve, short size of the remaining intestine and associated anomalies worsen outcomes.

CASE REPORT

Newborn (NB), female, full term (38 weeks), small for gestational age (SGA), weighing 2,405 grams, uneventful vaginal birth, APGAR 8/9, neonatal blood type O (+) and maternal O (+). The patient was admitted to the Hospital Regional do Norte (HRN), after 12 days of birth, on a zero diet, with clinical signs of regurgitation, fever, respiratory discomfort and malnutrition. According to the mother, the newborn, since the beginning of breastfeeding, still in the hospital of origin, refused to follow the diet, requiring supplementation with polymeric formula. She evolved with an emaciated appearance, without postnatal weight gain, hypoactivity, in addition to hyperthermia.

At this time, she was diagnosed with conjunctivitis in the right eye and early sepsis due to E.coli, with improvement after administration of the antibiotics gentamicin, ampicillin and amikacin. After this treatment, a diet was attempted again and the newborn presented with abdominal distension and was referred to the HRN for surgical evaluation. Upon admission physical examination, she was in a regular general condition, hydrated, eupneic, extremely emaciated, weighing 1,845 grams, with jaundice in residual zone 2 and well perfused extremities. Upon evaluation of the respiratory, cardiovascular, abdominal and neurological organic systems, he presented universal vesicular murmur, without adventitious sounds, regular heart rhythm in 2 beats, normophonetic sounds, without murmurs, flaccid abdomen, without distension or viceromegaly and normotensive anterior fontanelle, respectively. Regarding imaging tests, the double bubble sign was detected on the abdominal x-ray, and on the total abdominal ultrasound, the presence of thick bile inside the gallbladder and gaseous distension in the topography of the epigastric region (stomach and duodenum). Therefore, the surgical opinion was duodenal atresia, requiring surgical intervention, in this case, supra umbilical transverse laparotomy. This procedure was performed on the 4th day of hospitalization, without complications, and the RN spent the postoperative period in the ICU for 1 week, receiving medical

and multidisciplinary follow-up, with a good clinical outcome. Furthermore, the investigation of the maternal obstetric history shows that fetal changes caused by the congenital disease were not detected in obstetric ultrasounds during prenatal care.

DISCUSSION

Therefore, it is noteworthy that duodenal atresia is a congenital malformation of the duodenal region, which causes intrinsic intestinal obstruction and which can be detected by imaging through radiological topography, which highlights the characteristic finding of the disease (double gastric bubble), with the presence of air in the stomach and in the proximal stump of the duodenum, as seen in this case, in which gaseous distension was evident in the topography of the newborn's epigastrium.

The absence of gas in the distal segments suggests atresia, while the presence of gas in a heterogeneous form suggests duodenal stenosis or volvulus. The condition begins in the neonatal period, through vomiting (generally with a biliary appearance) and signs of intestinal obstruction. If not treated properly, newborns develop dehydration and pronounced weight loss. It is known that all patients must be admitted to a neonatal intensive care unit for stabilization and pre-surgical preparation, since the treatment of this anomaly is eminently surgical and aims to reconstruct gastrointestinal transit. In the case reported, we opted for supraumbilical transverse laparotomy.

CONCLUSION

Duodenal atresia is a congenital disease that can be diagnosed in utero and has important repercussions on neonatal life. Thus, according to the case presented, it is observed that neonatal intestinal obstructions manifest themselves with peculiar warning signs in the first days of life, and therefore require rapid diagnosis, in addition to adequate multidisciplinary monitoring, with the aim of reducing further complications. and perinatal morbidity and mortality.

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