

An infant illustrating single bubble on his CXR

Abstract

A male infant presented with choking, post feeding non-bilious vomiting and abdominal distention without meconial defecation. His CXR showed single "bubble," suggestive for pyloric atresia. After the standard stabilizing measures conducted, the operation room was arranged and he was underwent the corrective surgery via laparotomy. His postoperative period was unremarkable, with a decent outcome during 3 years of follow-up visits.

Keywords: Pyloric Atresia, infant, non-bilious vomiting

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Scenario and discussion

A male infant, on the second day of his life, was perceived to have choking, post feeding non-bilious vomiting and abdominal distention without meconial defecation. The infant had been born from a consanguineous marriage via natural delivery after the unprompted premature rupture of membranes while the gestational age of 36 weeks with a birth-weight of 2870 gr. first Physical examination after birth was unremarkable, and his breastfeeding had begun 8 hours after birth time, gradually. His Radiograph of the abdomen in the upright position showed a single "bubble," (Figure1) signifying a dilated stomach with an air-fluid level, suggestive for congenital pyloric atresia, as well as presence of air distal to his stomach. Usually a single bubble designates congenital pyloric atresia.



Figure 1 The CXR showing "Single Bubble" in a 2-day-old neonate.

Pyloric Atresia is a closed condition of the external os of the stomach (the pylorus). Symptoms comprise non-bilious projectile vomiting. This most often happens when the neonate is starting feeding. The classic age for presenting the symptoms is 2 to 12 weeks of age.¹ About 1 to 2 per 1000 neonates are affected. Male babies are influenced about 4 times more often than female ones. The first report on pyloric atresia was in 1888 with surgery management first done in 1912 by C Ramstedt.¹⁻³ Congenital pyloric atresia is relatively an infrequent anomaly which could be accompanied with other abnormalities, such as epidermolysis bullosa, Down's syndrome,

intestinal atresia, esophageal atresia and congenital heart disease.³ The exact etiology of pyloric atresia is still not clear.² Risk factors include cesarean section, preterm labor birth, being first born and feeding with bottle.³ The diagnosis might be made by sensation of an olive-shaped mass in abdomen.¹

Treatment begins by stabilizing measures including adjusting electrolytes and dehydration; then surgery.^{1,3}

After the standard stabilizing measures conducted, the operation room was arranged and he was underwent the corrective surgery via laparotomy. The gastrotomy was carried out via laparotomy which disclosed a prepyloric membrane (type 1 congenital Pyloric Atresia), which was removed during a standard surgery, and parenteral nutrition was continued for 6 days. His postoperative period was unremarkable, with a decent outcome during 3 years of follow-up visits.

Conclusion

In all neonatal birth that evidence of abdominal distention and lack of defecation besides inability to intake feeding investigation for gastrointestinal anomalies must be considered.

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Conflict of interest

Author declares that there is no conflict of interest.

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