Triple bubble

A girl, born prematurely at 35 weeks of gestation, started bilious vomiting at an age of 44 hours. X-ray showed an atypical double bubble and a duodenal atresia was suspected. However, the localization of the different air bubbles in the gastro-intestinal tract was debatable. After several hours, the repeated X-ray shows a clear triple bubble sign. In equivalent to a double bubble, this is suggestive for a jejunal atresia. Proximal jejunal distention is causing the third air bubble. Laparotomy revealed a jejunoileal atresia type IIIb, with an apple-peel aspect of the distal jejunum, without any other atresias in the small intestine or colon. After two surgeries, a partial jejunal resection and a Bishop Koop stoma, she is now improving with intestinal rehabilitation.

Bilious vomiting in a neonate is a pediatric emergency and should be considered as an intestinal obstruction until proven otherwise. A double bubble is suggestive for a duodenal atresia and a triple bubble for a jejunal atresia.