



Duodenal atresia- solving the double bubble mystery

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Objective

Prenatal diagnosis of duodenal atresia has a major impact on the outcome of pregnancy. Being an isolated entity or a part of the constellation of chromosomal abnormality, the double bubble entity is a decisive factor for early termination or continuation/ interventions. Ultrasound plays a crucial role in diagnosis and distinguishing it from other possible differentials like mid-gut volvulus, choledochal cyst, enteric duplication cysts to name a few.

Methods

Grey scale ultrasound was performed in gravid females at 14- 23 weeks of gestation using curvilinear probe on Mindray DC-7 and Voluson S6 (GE healthcare) machines at a tertiary healthcare facility. Emphasis was laid on anomaly screening, liquor index, fetal growth parameters. Detailed clinical profile was discussed in cases with bad obstetrics history. No invasive procedure was performed.

Results

Five cases of double bubble entity were seen over a period of one year. [?] Associated oligohydramnios- [?] Other associated anomalies- [?] Spina bifida [?] Cardiac anomalies [?] Skeletal dysplasia/anomalies [?] False positive cases- [?] Annular pancreas [?] Gonadal cyts [?] Mesenteric cyst [?] Choledochal cyst [?] Midgut volvulus.

Conclusion

Through this series, we would emphasize on the approach towards a case with double bubble in the fetal abdomen using ultrasound modality to achieve the most accurate diagnosis. Duodenal atresia diagnosed prenatally is highly associated with other chromosomal anomalies which require genetic work up (Karyotyping). Surgical correction can be planned in isolated cases with good prognosis. The whole outlook of the double bubble entity changes by addressing it using our fetal abdomen protocol that might help to better the outcome.