

# Fetal Gastric Pseudomass in Anomaly Scan

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## ABSTRACT

**Introduction:** This report shows a fetal intragastric echogenic mass that disappeared after 90 min follow up scan. The origin of echogenic masses within the gastric lumen is incompletely understood. The reasoning is that they may be due to swallowed cells that accumulate in the second trimester, which disappears after certain time period.

**Case description:** A primigravida of 22 weeks gestation was referred to the department of radio diagnosis for anomaly USG. The fetal abdomen showed a rounded hyperechoic mass within the gastric lumen which appeared attached to the gastric wall. There was no change in position or mass with change in position of fetus. There was no flow on Doppler within the mass. There was no gastric wall thickening or luminal dilatation. The fetus was rescanned after one and half hour and the hyperechoic lesion had disappeared.

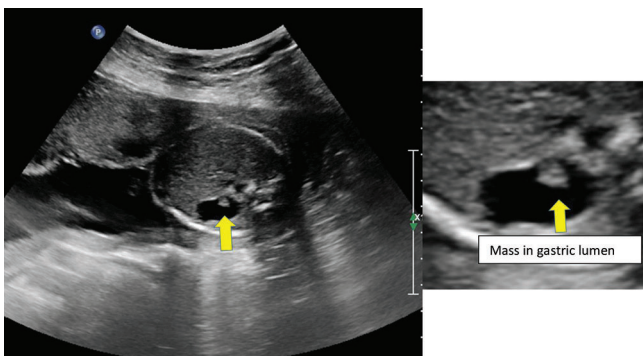
**Conclusion:** A solitary fetal gastric pseudomass is of no significance in antenatal or postnatal period. This case illustrates the fact that the gastric pseudomass could disappear with reassessment .This will help avoid unnecessary anxiety to the parents and further evaluation.

**Keywords:** Pseudomass, Gastric, Fetal

## INTRODUCTION

Prenatal ultrasound examination may detect echogenic intragastric masses which maybe transient. It was first reported by Fakhry and coworkers.<sup>1</sup> The origin of echogenic masses within the gastric lumen is incompletely understood. The reasoning is that they may be due to swallowed cells that accumulate in the second trimester, which disappears after certain time period.<sup>1</sup>

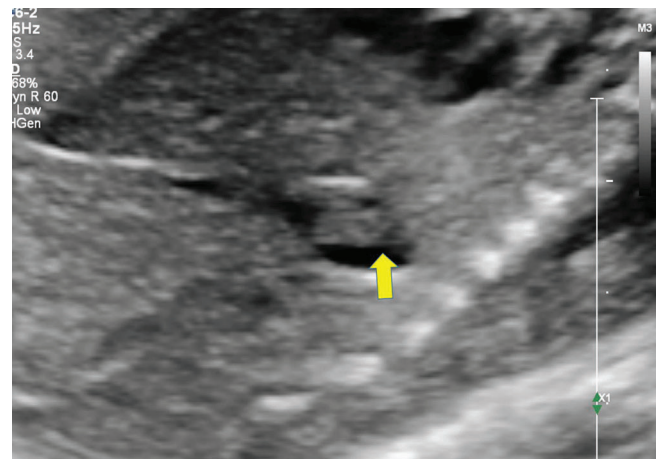
These intragastric components conglomerate and appear like a mass within the stomach bubble termed as “pseudomass.” Fortunately, they have no implications on pregnancy management. The case presented here is unique as the fetal intragastric mass persisted throughout the scan and it disappeared after 90 min follow up scan.



**Figure-1:** Axial section of fetal abdomen showing rounded, hyperechoic intragastric mass (yellow arrow).

## CASE REPORT

A primigravida of 22 weeks gestation was referred to the department of radio diagnosis for anomaly USG. The mother was in a non consanguinous marriage had no contributory history or any abnormal clinical finding. The fetus was scanned using Affinity 50 machine. The fetal biophysical parameters and weight were normal. There were structural anomalies detected. The fetal abdomen showed a rounded hyperechoic mass within the gastric lumen, measuring 32 × 20 mm which appeared attached to the gastric wall (Fig 1 and 2). There was no change in position or mass with change



**Figure-2:** Oblique section of fetal abdomen showing hyperechoic intragastric mass.



**Figure-3:** Sagittal section of fetus showing disappearance of the lesion in the follow up scan

in position of fetus. There was no flow on Doppler within the mass. There was no gastric wall thickening or luminal dilatation.

The fetus was rescanned after one and half hour and the hyperechoic lesion had disappeared (Fig 3).

## DISCUSSION

During embryologic development, the fetal stomach descends into the abdomen and acquires its final position by 7 weeks gestation. Gastric peristalsis appears after 4-5 months' of gestation when significant neuromuscular development has taken place.<sup>2</sup>

Fetal gastric echogenic shadow mimicking a mass is an occasional finding during a second trimester USG. The reported incidence of this finding is 1 in 300 second trimester scans.<sup>3</sup> The origin of echogenic masses within the gastric lumen is incompletely understood. They may be due to swallowed cells that aggregate because of the relatively poor peristaltic activity in the stomach early in the second trimester.<sup>4</sup> The swallowed vernix in the stomach comprises the cells shed from fetal skin, urinary epithelium, and umbilical cord and leads to the formation of a pseudomass usually of size in range of 4-12 mm.<sup>4</sup> Other causes for pseudomass formation includes intra amniotic bleeding secondary to subchorionic haemorrhage, amniocentesis and abruption placentae.<sup>5,6</sup> They inevitably disappear during follow-up examinations and hence further evaluation of this finding is unnecessary.

This fetus had a rounded intra gastric mass which persisted throughout the scan and disappeared at 90 minute follow-up scan. The mass was not mobile at the time of examination. Doppler evaluation did not reveal vascularity. The differential diagnoses of fetal intra gastric mass includes endogastric teratoma.<sup>7</sup>

## CONCLUSION

A solitary fetal gastric pseudomass is of no significance in antenatal or postnatal period. This case illustrates the fact that the gastric pseudomass could disappear with reassessment. This will help avoid unnecessary anxiety to the parents and further evaluation.

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