Isolated versus associated pathology of fetal abdominal cystic masses in the second and third trimesters of pregnancy

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Objective
To analyse the possible association of other ultrasound abnormalities with fetal abdominal cystic masses in the second and third trimesters of pregnancy.

Methods
Retrospective analysis of fetal abdominal hypoechoic cystic masses diagnosed in prenatal ultrasound imaging over the last three years (January 2016 - December 2018) in a tertiary center. Ultrasound images were stored and reviewed by two expert sonographers. All infants were examined at birth and followed up by paediatricians with abdominal ultrasound.

Results
Out of 5451 fetuses analysed, there were 81 cases of fetal abdominal hypoechoic masses at gestational ages ranging from 17-37 weeks' gestation. 82.7% of them (n=67) were isolated findings, and 17.3% (n=14) had associated ultrasound findings. Of those that were abdominal cysts (2 mesenteric, 1 intestinal duplication cyst, 1 liver, 3 ovarian, 1 adrenal, 1 pancreas annulare with double bubble sign), all were isolated findings except for the hepatic cyst which was associated with ascites, liver calcification and a meconium peritonitis syndrome that resolved spontaneously.

Conclusion
Fetal abdominal cysts are relatively uncommon. Although it is very important to rule out associated pathology, most of them present as an isolated finding.