

# False-positive rate in prenatal diagnosis of surgical anomalies.

[Borsellino A](#), [Zaccara A](#), [Nahom A](#), [Trucchi A](#), [Aite L](#), [Giorlandino C](#), [Bagolan P](#).

Department of Medical and Surgical Neonatology, Bambino Gesù Pediatric Hospital, 00165 Roma, Italy. [alessandroborsellino@virgilio.it](mailto:alessandroborsellino@virgilio.it)

**BACKGROUND/PURPOSE:** Technical refinements and increasingly sophisticated equipment have led to higher sensitivity in prenatal diagnosis of congenital malformations; however, such progress may be accompanied by decreased specificity. The aim of this study is to evaluate evolution of prenatal diagnosis from the first sonographic suspicion of fetal anomaly until after delivery (diagnosis confirmed, resolution before birth, healthy baby, or affected with different disorder) to document rate of false-positive (FP) results. **METHODS:** Retrospective review of prenatal ultrasound examinations performed at our institution between 2000 and 2002 was conducted. The series includes pregnancies referred to our department after detection of thoracic and abdominal anomalies at routine obstetrical sonography and with a follow-up comprising at least the first 6 months of life. Urologic malformations were excluded. Those fetuses who proved healthy at birth were considered FP results. **RESULTS:** One hundred fifty-seven fetuses/neonates underwent complete follow-up. Prenatal diagnosis of esophageal atresia resulted in 3 (27%) of 11 FPs. Finding of dilated bowel, isolated or associated with hyperechogenicity or ascites, was not predictive of small bowel obstruction in 7 (41%) of 17 fetuses. No FPs were found with regard to abdominal wall defects (8 gastroschisis and 26 omphaloceles, all confirmed at birth). Concerning thoracic malformations, no FPs were seen among the 28 cases of congenital diaphragmatic hernia, whereas diagnosis of lung malformation presented a specificity of 97% (1/28 FP). Ovarian cysts accounted for an FP rate of 17% (4/23 FPs). Overall, a percentage of FP of 12% (6/50) was seen in 2000, of 11% (5/44) in 2001, and 9% (6/63) in 2002, with no statistically significant difference. **CONCLUSIONS:** Because of the high FP rate regarding some particular anomalies, unnecessary psychological burden to prospective parents may ensue. This issue should be dealt with in future prospective studies.

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