Objective
To evaluate the perinatal results for fetuses and neonates with left-sided congenital diaphragmatic hernia (CDH) and the role of prenatal diagnosis in the pregnancy outcome.

Methods
We reviewed data from fetuses and neonates with left-sided CDH, managed from January 2009 and December 2013 in the University Clinic Hospital, Craiova, Romania. The following data were analyzed: the gestational age at the time of diagnosis, fetal karyotyping, presence of associated structural malformations, ultrasound (US) data (circumference and area of right lung, lung-to-head ratio – LHR, observed/expected LHR, hepatic herniation), the type of antenatal care, the pregnancy outcome, the place of birth and the conventional autopsy data, if performed. Perinatal outcomes were obtained by reviewing hospital documents.

Results
Twenty-one cases were identified. No fetal surgery was performed in our series. Mean gestational age at time of diagnosis was 29 weeks of amenorrhea (WA) (range, 16–37 WA). Associated structural malformations were noticed in nine (42.8%) cases, in which three fetuses had a normal karyotype and two had chromosomal abnormalities, and four fetuses were not investigated. Isolated congenital diaphragmatic hernia was confirmed in 12 (57.1%) cases. All cases diagnosed at early second trimester were terminated. The overall mortality rate was 61.9%. Rates of fetal deaths, early neonatal deaths, late neonatal deaths, and survival were 28.5%, 19%, 14.2%, and 38%, respectively. The perinatal mortality rate was 19% in cases with isolated congenital diaphragmatic hernia.

Conclusion
The overall and perinatal mortality rate in congenital diaphragmatic hernia was high in our series. Early perinatal deaths are associated with early diagnosis and with the presence of other structural defects. In isolated congenital diaphragmatic hernia, mortality is related to the presence of herniated liver and severe pulmonary hypoplasia, this correlated well with antenatal ultrasound parameters which were used for the estimation of fetal lung volumes.