Objective
To evaluate the prenatal course and perinatal outcome of fetuses with bronchopulmonary sequestration (BPS) managed expectantly or using minimally-invasive methods depending on the presence of fetal hydrops.

Methods
This was a retrospective study of 14 fetuses diagnosed with bronchopulmonary sequestration between 2006 and 2014 in a tertiary fetal therapy center.

Results
In ten fetuses with BPS, at the time of initial diagnosis no signs of hydrops were stated. These fetuses were managed expectantly. Partial regression of the lung lesions, no change and progression of the sequestration’s size were stated in 6(60%), 3(30%) and 1(10%) case respectively. All infants were born at term; seven of them required postponed sequesterectomy. Four fetuses met qualification criteria to intrauterine intervention: thoraco-amniotic shunt was inserted in three fetuses, in one case laser coagulation of the feeding vessel was performed. In the group of fetuses treated with thoraco-amniotic shunt, hydrops resolution was stated within one week after intervention however no significant regression of lung lesions in subsequent ultrasound scans was stated. In case of the fetus treated by laser coagulation of the feeding vessel a marked regression of the lesion’s volume in the 4-weeks evaluation was stated. All infants were born at term and required sequesterectomy.

Conclusion
In case of fetuses with BPS without hydrops, the possibility of spontaneous regression of bronchopulmonary sequestration is relatively high. Therefore the prognosis is favourable and expectant management justified. In case of hydropic fetuses with BPS, intrauterine therapy using thoraco-amniotic shunts or laser coagulation of the feeding vessel prevents fetal demise. Laser coagulation of the feeding vessel is also likely to contribute to regression of the lesion’s size.