ABSTRACT
Chromosomal abnormalities occur among 0.1 – 0.2% living children, and is one of the causes for severe birth defects. Prenatal screening can help identify cases with high-risk of aneuploidy, hence able to advise the mothers to have invasive tests (amniocentesis, CVS) to identify these abnormalities.

OBJECTIVE
To evaluate the chromosomal abnormality rate in fetus through karyotyping.

METHODS
This retrospective study involves 3884 amniocentesis which were performed in our prenatal diagnosis department. The procedures were conducted during 7 years (from 2010 to 2016), using 27 gauze spinal needle transabdominally under ultrasound guidance.

RESULTS
There were 3884 pregnant women from 17 to 27 weeks of gestation having amniocentesis at Hanoi Obstetrics and Gynecology Hospital.

The most indication for amniocentesis is an increased risk of fetal aneuploidies due to screening tests (NIPT, Double test, Triple test).

CONCLUSIONS
There is a variety of abnormal karyotypes in which aneuploidy was the most common.

Amniocentesis results

We identify 172 cases of chromosomal abnormalities, equal to 4.43 %. Aneuploidy was the most common pattern which was up to 72.76% (125/ 172 cases).

Among amniocentesis cases, none was failure. We reported a total fetal loss in 0.13% (5 cases) of patients underwent amniocentesis.