

## Morphological abnormalities during the first trimester of pregnancy: Importance of early scan

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### Objective

The importance of the first trimester ultrasound in detecting a large number of fetal abnormalities.

### Methods

A retrospective study in the department "c" of the center of maternity and neonatology of Tunis, during a 3 years period, from January 2011 to December 2013. We included all patients who underwent a termination of pregnancy (TOP) after the discovery of morphological abnormalities in the first trimester scan.

### Results

We identified 25 cases of TOP for morphological abnormalities detected by ultrasound in the first trimester out of a total of 83 TOP (3.1%) for other several causes. The average gestational age was 12 weeks' gestation. The mean maternal age was 31 years (range: 19 to 42 years). We found 14 cases of cystic hygroma (56% of malformations), 7 brain anomalies (28% of detected anomalies with 2 cases of exencephaly, 1 case of holoprosencephaly and 4 cases of anencephaly), one defect in the abdominal wall and 3 cases of complex cardiac anomalies.

### Conclusion

Certainly the first trimester ultrasound does not detect all morphological abnormalities, but it allows the early diagnosis of major anomalies and can define risk groups requiring further investigations. Thus it allows early management of certain abnormalities. Defects that must be detected during the first trimester are at least: anencephaly, holoprosencephaly, most micromelia, defect in the abdominal wall, megacystis and bursitis.