

Role of early ultrasound in prenatal screening for morphological abnormalities in the first trimester

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Objective

The objective of this study is to determine the different malformations accessible to prenatal screening and the contribution of early ultrasound to reduce their impact.

Methods

A retrospective study conducted in Department of Obstetrics and Gynecology « C » in the Center of Maternity and Neonatology of Tunis. During two years: from January 2011 to December 2012. Inclusion criteria: all patients who had a therapeutic abortion on morphological malformations detected by ultrasound in the first trimester.

Results

We identified 25 cases of medical Interruption of pregnancy for morphological abnormalities in the first trimester ultrasound, from a total of 83 cases of medical Interruption of pregnancy (30. 1%), the average gestational age was 12 weeks. The average age of pregnant was 30. 8 years [19 to 42 years]. We found 14 cases of cystic hygroma (56% of malformations) and 7 brain malformations. One case of a defect in the abdominal wall was reported and three cases of complex heart defect.

Conclusion

Ultrasound in the first trimester allows the early diagnosis of major abnormalities and helps to define risk groups requiring additional investigations. Defects that need to be highlighted are: Anencephaly, holoprosencephaly, major micromelia, omphalocele, gastroschisis, coelosomy, megacystis and cystic hygroma of the neck.