

## Clinical Image

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# Cranial neural tube defects: Sonographic diagnosis of the anencephaly during pregnancy

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### Abstract

Anencephaly or cranium bifida is a neural tube's defect which consists in a deformity of the skull and the scalp which are not formed completely. It can be diagnosed during antenatal period during ultrasound morphological routine test. In our case, it's an unattended twin pregnancy in a multiparous patient who came for a usual ultrasound morphological test. The sonographic scan finds out an uncomplete cranial neural tube with a totally absent brain and skull, type anencephaly.

### Description

A 45 years old woman with no coexisting illness who gave birth to 4 kids by vaginal delivery without complications. She doesn't report any malformations.

She came for a fetal morphological ultrasound as a routine antenatal test with unclear date of last menstrual period.

Ultrasound scan shows a twin dichorionic diamniotic pregnancy, a single placenta with normal insertion with sufficient amniotic fluid and biometry measurements estimated a pregnancy's gestation of 26 weeks.

Organ assessment of the first male fetus showed satisfactory development and a normal cardiac activity.

Second fetus had an irregular head morphology with bulging eyes showing the typical appearance of "frog eye" sign, absent brain and absent cranial bone suitable with anencephaly diagnosis.

No spinal cord malformations associated.

The anencephaly or cranium bifida is a defect of the neural tube's development consists in a deformity of the skull and the scalp which are not formed completely.

This affection is not compatible with survival after birth since

there a forming failure of the brain, the lamina terminalis and the bony segment of the skull.

The neural tube defects are a multifactorial disease.

Some risks can increase its incidence such as obesity, poorly controlled diabetes and antiepileptic medicines.

Folic acid and a type of B vitamin are advised to prevent most neural tube defects.



**Figure 1:** Bulging eyes showing "frog sign".

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**Figure 2:** Irregular head with absent brain and absent bony segment of the skull.

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