

CONJOINED TWINS H 9.

A case report

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Introduction

- 29 year old healthy G1P0 woman seeking confirmation of gestational age of her pregnancy.

Materials and Methods

- A routine ultrasound examination was performed in a private maternity clinic (Appelmedi, Kotka, Finland) using a Hitachi EUB-5500 ultrasound device. A more accurate ultrasound examination was performed using a Voluson 730 Pro device in the maternity unit of the Kymenkaakso Central Hospital.
- The pregnancy was terminated surgically on social indications at the gestational age of 10+0.

Results

- Conjoined twins were detected in the vaginal ultrasound examination H 9+4. Two days later CRL measurements were 26 mm confirming the gestational age. (Fig. 1). The foetuses were facing each other and had common thoracic and abdominal cavities with a single common heart. One twin had 3mm hydrops all over the body and head and had reduced movements compared with the other twin. (Fig.2)
- Pathological examination revealed that the conjoined twins had shared heart, lung, liver, adrenal and kidney tissues.

Discussion

- The incidence of conjoined twinning in literature is 1 in 50,000 to 1 in 200,000 live births and 1% of monozygotic twins. The origin of conjoined twins is proposed to be at the primitive streak stage of the embryonic plate (15-17 days), and results from an error in blastogenesis due to incomplete fission of a single zygote. The most common type of connection is the thoracopagus, of which 75 % present with a common joined heart, a finding that is deemed surgically inseparable.
- The use of 3D sonography served as an additional counselling tool in presenting the anatomic findings to the patient, who opted for termination of this pregnancy with poor prognosis without additional undue delays by choosing social indications instead of documented foetal malformations.
- This is one of the earliest diagnosed thoraco-omphalopagus cases presented with two- and three-dimensional ultrasound confirmed with photographs and detailed pathologicoanatomical diagnosis.



Fig. 1. An ultrasound image of the conjoined twins H 9+6



Fig. 2. The 3D presentation of the conjoined twins H 9+6



Fig. 3. The conjoined twins prepared free from the amniotic sac and placenta for the pathologic examination.