

MONOCHORIONIC MONOAMNIOTIC TWIN PREGNANCY COMES TO TERM WITHOUT COMPLICATIONS WITH A SINGLE FETAL DEMISE OF A TWIN SINCE 30 WEEKS: A CASE REPORT AND LITERATURE REVIEW**Othman Elharmouchi*², Youssef Essebbagh¹, Khadija Errmili¹² and Aziz Baydada¹**¹Gynaecology-Obstetrics and Endoscopy Department, Maternity Souissi, University Hospital Center IBN SINA, University Mohammed V, Rabat, Morocco.²Gynaecology-Obstetrics and Endocrinology Department, Maternity Souissi, University Hospital Center IBN SINA, University Mohammed V, Rabat, Morocco.***Corresponding Author: Othman Elharmouchi**

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SUMMARY

A single fetal demise in a twin gestation occurs infrequently: it is recognized in fewer than 7% of twins past the first trimester. Increased morbidity is associated primarily with monozygotic twins who have vascular anastomoses associated with diamniotic-monochorionic placentation, and with monoamniotic twins. Morbidity and mortality of these twin gestations potentially can be reduced with identification of the at-risk pregnancy and with intensive antenatal surveillance. We report on a case of a mono choral mono amniotic twin pregnancy in a 37-year-old women in whom obstetrical ultrasound surveillance scan showed a twin pregnancy with negative cardiac activity in one of the fetuses since 30 weeks of amenorrhea comes to term without complications.

INTRODUCTION

Chorionicity and zygosity define the gemellity of pregnancy. However, the identification of chorionicity is essential, representing a prognostic factor judging mortality, morbidity, and surveillance modalities, ultrasound is the reference examination for positive diagnosis.^[1] They are rare but have a very high morbidity, hence the interest of a precise and early diagnosis in order to optimize the type of monitoring and the ideal term of birth.

OBSERVATION

This is a 37 year old patient, with no particular pathological history, G1P2 : twin pregnancy estimated at 38 weeks of amenorrhea according to a precise date of the last menstrual period and a dating ultrasound, the pregnancy is well monitored in our department.

The prenatal check-up is without anomalies, according to ultrasound T1 it is a mono choral mono amniotic twin pregnancy.

At 30 weeks of amenorrhea, an obstetrical ultrasound surveillance scan showed a twin pregnancy with negative cardiac activity in one of the fetuses, the patient benefited from ultrasound surveillance with an umbilical Doppler performed twice a week without any anomalies, and a complete check-up was requested, which returned normal and pulmonary maturation was instituted.

A caesarean section was indicated at 38 weeks of amenorrhea allowing the extraction of a female newborn Apgar 9/10, weighing 3000 g, and a macerated female newborn weighing 1200 g. The postoperative course was without complications.

PICTURE SHOWING SINGLE FETAL DEMISE OF A TWIN**DISCUSSION**

Mono amniotic twin pregnancies correspond to the development of two fetuses within a single amniotic cavity, resulting from a late division between the 8th and 13th day after fertilisation.^[2]

The optimal time for this diagnosis is between 11 and 14 weeks of amenorrhoea. Once the first diagnosis has been made, it will be checked again eight days later.^[3]

The diagnosis of mono chorionic mono amniotic pregnancy is based on several criteria: the fetuses share a single placenta with a single gestational sac and yolk sac and there is no lambda or T sign present when an amniotic membrane is visualised between the two fetuses.^[4] Entanglement of the cords is a sign of mono amniotic character and can be visualised early. Mono amniotic twin pregnancies have a higher risk of complications than in singleton pregnancies.^[5]

The risk of prematurity in this type of pregnancy is one of the primary issues in management. The incidence of pre-eclampsia in this type of pregnancy is increased, hydramnios, intrauterine growth retardation, transfusion-transfusion syndrome, and poly malformative syndrome. fetal death in utero is common in 25-50% of mono chorionic mono amniotic twin pregnancies.^[6]

Fetal death in utero of one of the twins is an incident that complicates 0.54-6.8% of twin pregnancies This exposes the living twin to three types of risk: mortality, prematurity and the occurrence of anoxo-ischaemic lesions.^[7]

In-utero foetal death of a twin in the first trimester has few consequences, whereas in the second and third trimesters it is life-threatening with 38% of deaths in the second.^[8]

The persistence of embryonic tissue can be the cause of an inflammatory reaction by the release of cytokines, responsible for the premature onset of uterine contractions.

Anoxicemic lesions are explained by the passage of numerous substances in the survivor that lead to emboli and vascular thrombosis. In this context, extraction of the survivor, if the term permits, would be recommended.^[9,10]

In the case of monochorionicity, management varies with the assumed length of the interval between death and ascertainment. If death was noted in the first 24 hours, the possibility of correcting haemodynamic disturbances and preventing anoxicemic lesions with the search for a possible foetal anaemia.^[11]

In this case, monitoring by obstetrical ultrasound to look for cerebral lesions twice a week, a fetal MRI is recommended to better detect cerebral lesions that cannot be detected by ultrasound.^[12]

Some opt for a systematic delivery as soon as the lungs reach maturity, at 32 or 34 weeks' gestation. On the other hand, other teams allow these pregnancies to evolve with monitoring of the survivor.^[13,14]

On the psychological level, support should always be offered to these couples who are doubly distressed by the loss of one of their twins and the future of the other.

CONCLUSION

In all twin pregnancies, the diagnosis of chorionicity must be a priority. This diagnosis must be made at the first ultrasound scan and as early as possible, as early diagnosis improves the reliability and prognosis neonatal.

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Competing interests

The authors declare that they have no competing interests.

Consent for publication

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Ethics approval and consent to participate Ethics approval has been obtained to proceed with the current study. Written informed consent was obtained from the patient for participation in this publication

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