

Succenturiate Lobe of Placenta: The Importance of Prenatal Diagnosis: Clinical Case

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ABSTRACT

Introduction. The succenturiate lobe is a morphological variation of the placenta that usually appears as a separate lobe from the main placental disc and can be single or multiple. This incidence increases when there is a history of pelvic infection, infertility, twin pregnancies, or preeclampsia. As for the product, it can present prematurity, growth disorder, and surgical resolution of pregnancy. **Clinical case.** Female, 30 years old, with the following obstetric history, menarche 15 years, rhythm 28X5 days, dysmenorrhea, IVSA: 15 years-old, Pregnancies 3, births one, 5 years-old, abortion one in the first trimester, cesarean section one. Emergency with detects blood pressure 154/90 mmhg, second take 166/93 mmhg. The diagnosis of pregnancy of 29.4 weeks of gestation by first-trimester ultrasound, preeclampsia is integrated. Among the surgical findings, a violaceous uterus is observed on the anterior and anterior sides, with clinical data of hematic infiltration secondary to placental abruption grade 1, Placenta with a succenturiate lobe **Discussion.** Placental anomalies are rare because they have a low incidence and in most cases, their diagnosis is made after delivery, however, they can cause problems in the third stage of labor such as placental retention or postpartum hemorrhage, the latter because the accessory vessels can rupture and compromise the viability of the product or during delivery, the accessory lobe can be retained causing hemorrhage and compromising the life of the mother. **Conclusions:** The antenatal diagnosis of placental anomalies is important because it allows these patients to be classified and considered as high-risk pregnancies.

Keywords: Doppler ultrasound, placenta succenturiata, placental abnormalities, Doppler ultrasound.

INTRODUCTION

The succenturiate lobe is a morphological variation of the placenta that usually appears as a separate lobe from the main placental disc and can be single or multiple. Its incidence is approximately 2 cases per 1000 pregnancies or 1.04% in the world, this anomaly can increase the presentation of type II vasa previa as well as postpartum hemorrhage secondary to retained placental tissue. This incidence increases when there is a history of pelvic infection, infertility, twin pregnancies, or preeclampsia. As for the product of conception, it may present a risk of prematurity, fetal growth disorder, and the resolution of pregnancy by cesarean section. It is considered that it usually occurs in pregnant women over 35 years of age and in patients undergoing in vitro fertilization. The differential diagnosis should be established with a bilobed placenta, a twin pregnancy with two placentas, a focal contraction of the myometrium, or an isoechoic hematoma in abrupt placentae ⁽¹⁻²⁾.

Clinical case

30-year-old female, with the following obstetric history, menarche 15 years, rhythm 28X5 days, dysmenorrhea, IVSA: 15 years, Pregnancies 3, births 1 5 years ago, with a product weighing 2700 grams, abortion 1 of the first trimester, cesarean section one. During the current pregnancy course she has with irregular prenatal control, without a screening of the first and second trimesters. She went to the emergency room with blood pressure figures of 154/90mmHg, second shot 166/93mmHg, HR 89, BR 18 bpm, Temperature 36.2°C, Glasgow Scale 15. Weight 74 kg, height 143 cm. On physical examination, uterine fundus 27cm, right back, fetal heart rate 142 per min, no palpable uterine activity at the time of examination, fetal movements present, no cervical rafters. Complementary studies: blood type O (+), Hb 12.7 g/dL, Hct 38.9 g/dL, Leucocytes 18.9/mm³, Neutrophils 78%, Platelets 182x10⁹/L, Total bilirubine 0.28 mg/dL, Direct bilirubine 0.04 mg/dL, Indirect bilirubine 0.24 mg/dL, TGO 51 mg/dL, TGP 59 mg/dL, Alkaline phosphatase 180 UI/L, Total proteins 4.5 g/dL, Serum albumin 2.5 g/dL, GGT 20 U/L, Glucose 125 mg/dL, Urea 44.9 mg/dL, Creatinine 0.69 mg/dL, Ac. Uric 6.5 mg/dL, Hb1Ac 4.8%. ESR 16, General Urine Test: proteins 1000. Constant monitoring of blood pressure is maintained, at levels of 140/90 mmHg. Antihypertensive management was started with nifedipine 10 mg every 8 h and betamethasone 12 mg intramuscularly every 24 h. The diagnosis of pregnancy of 29.4 weeks of gestation by first-trimester ultrasound, and the preeclampsia is integrated. According to the evolution, it is decided to interrupt the pregnancy by abdominal route, obtaining product, and weight, a violaceous uterus is observed in the anterior and anterior face, with clinical data of hematic infiltration secondary to placental abruption grade 1, (Fig. 1,) without adequate response to uterotonics, B-Lynch compressive suture is performed (Fig. 2). The placenta is reviewed and the presence of a succenturiate lobe of 7 cm in diameter was observed, with its respective accessory vessels, with a zone of marginal detachment. Fig. 3. The piece was sent for a definitive histopathological study.

DISCUSSION

Placental anomalies are rare because they have a low incidence and in most cases, their diagnosis is made after delivery, however, they can cause problems in the third stage of labor such as placental retention or postpartum hemorrhage, the latter because the accessory vessels can rupture during uterine contractions and compromise the viability of the product or during

delivery, the accessory lobe can be retained causing hemorrhage and compromising the life of the mother ⁽³⁾.

The diagnosis of the placenta succenturiata requires certainty because the blood circulation is presented in two parts and this can be confused with amniotic bands or uterine septum during the control ultrasound, in such a way that it should not be thought of with a bilobed placenta that could be considered as two placentas divided by a membrane and chorionicity due to multiple pregnancies since the latter can be diagnosed during the first trimester of pregnancy. Some studies suggest that this entity can cause sudden fetal death when the vessels cross the cervical *vasa previa*. The accuracy of prenatal diagnosis is important both for the management of labor and for its results, and this are possible with color Doppler ultrasound ⁽⁴⁾.

Nelson LH et al, report that in the case of placenta succenturiata, postpartum hemorrhage can occur which can even become a catastrophic scenario when vascular rupture of the placental vessels that go to the placenta occurs therefore they recommend an ultrasound of this entity ⁽⁵⁾. Hata K et al, treated 5 cases of placenta succenturiata that underwent prenatal control with ultrasound for pregnancy surveillance, emphasizing the maternal and fetal risks due to retained placenta that could cause postpartum hemorrhage ⁽⁶⁾.

Chihara H et al, ⁽⁷⁾ attended a case of a pregnant woman at 16 weeks of gestation and through ultrasound; they found a band-like structure in the amniotic cavity in a

27 years-old pregnant woman. Doppler ultrasound revealed blood flow in this structure and made the diagnosis of placenta succenturiata instead of amniotic band, so it was important to differentiate these diagnoses through ultrasonography.

Suzuki S et al, ⁽⁸⁾ carried out a study in 47 patients with placenta succenturiata in 7666 controls looking for the clinical significance between this type of patients and in pregnant women with normal placenta where they found that age equal to or greater than 35 years and history of fertilization in vitro were risk factors concluding that adverse obstetric outcomes in patients with placenta succenturiata could be prevented. Conclusions: The antenatal diagnosis of placental anomalies is important because it allows classifying these patients and considering them as high-risk pregnancies and thus being prepared for contingencies that could be caused by these pathologies. The placenta succenturiata is currently relatively easy to diagnose as long as the placenta is checked routinely and carefully due to the serial Doppler ultrasonography equipment that is within the reach of the obstetric services of many hospital units.

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FIGURES

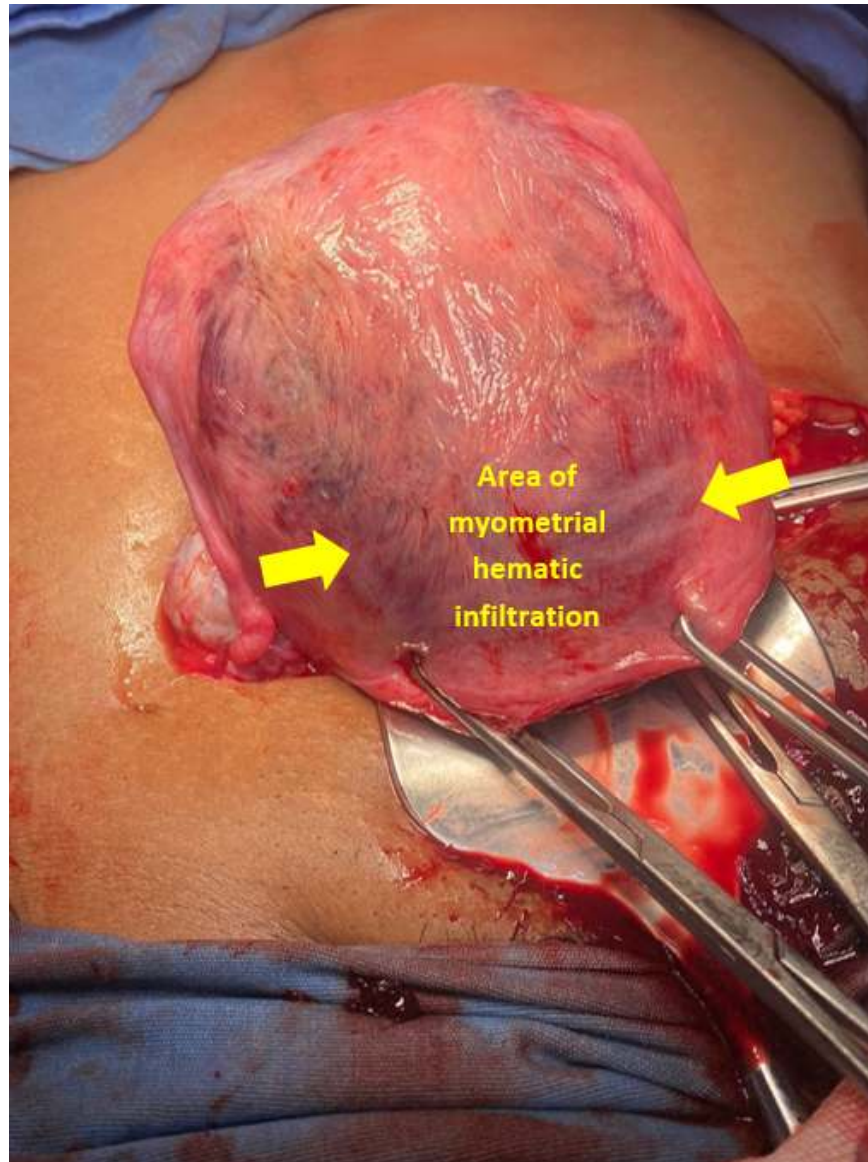


Figure 1. Hematic infiltration zone of the uterine myometrium.

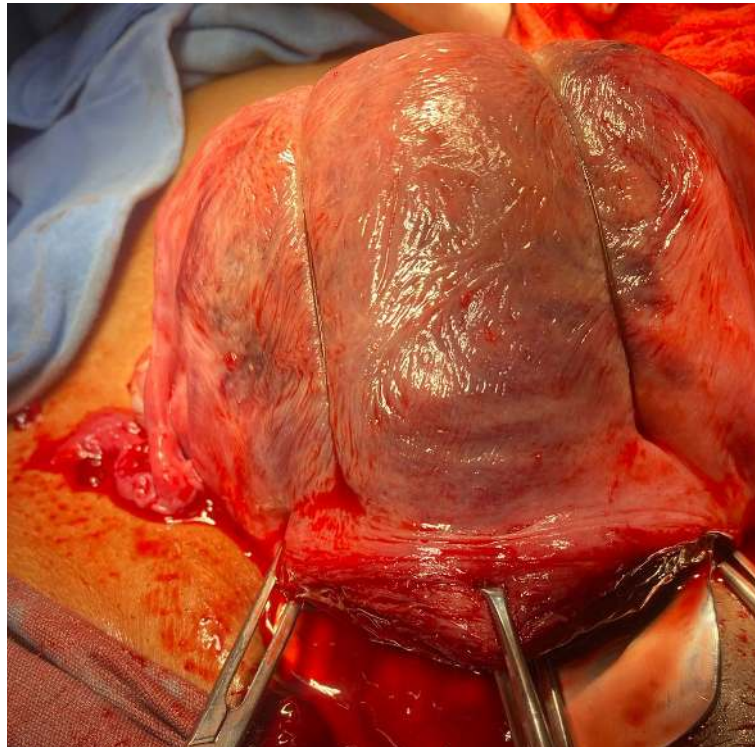


Figure 2. B-Lynch compressive suture for the control of uterine atony.

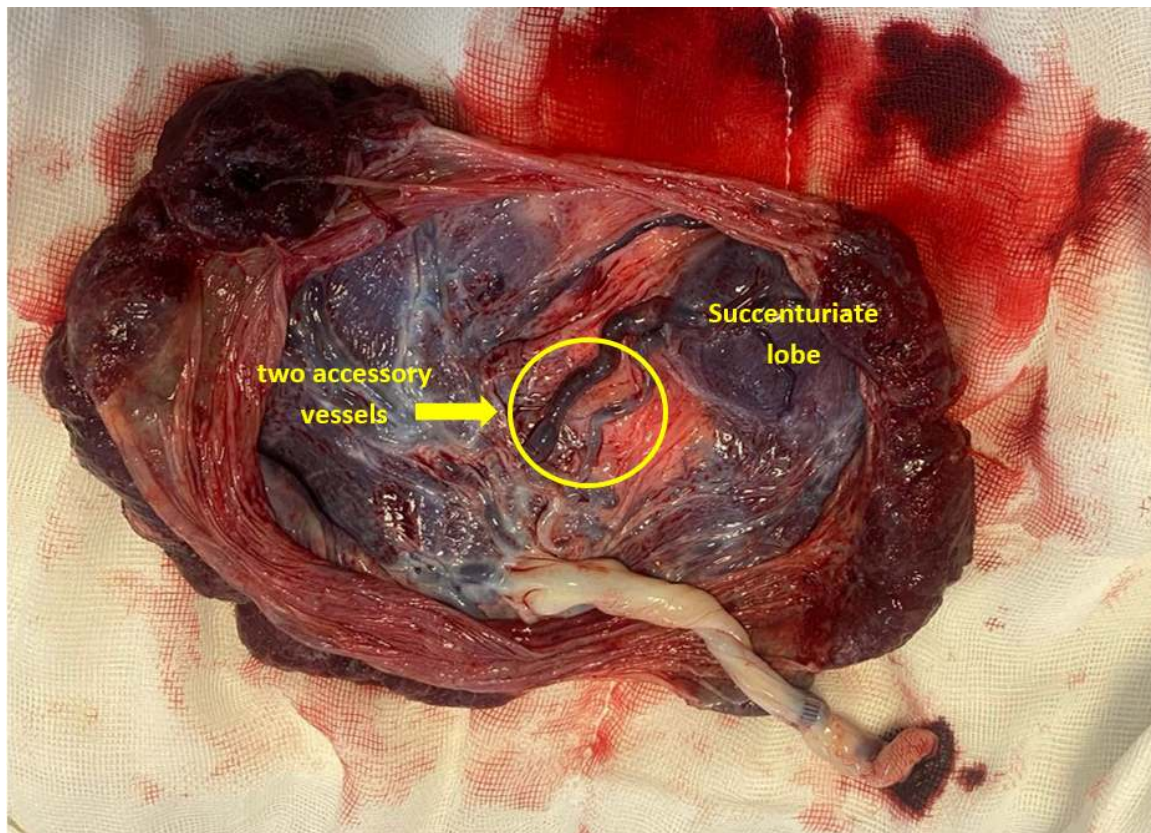


Figure 3. Macroscopic view of the fetal face of the placenta: succenturiate lobule with two vessels on the membranes.

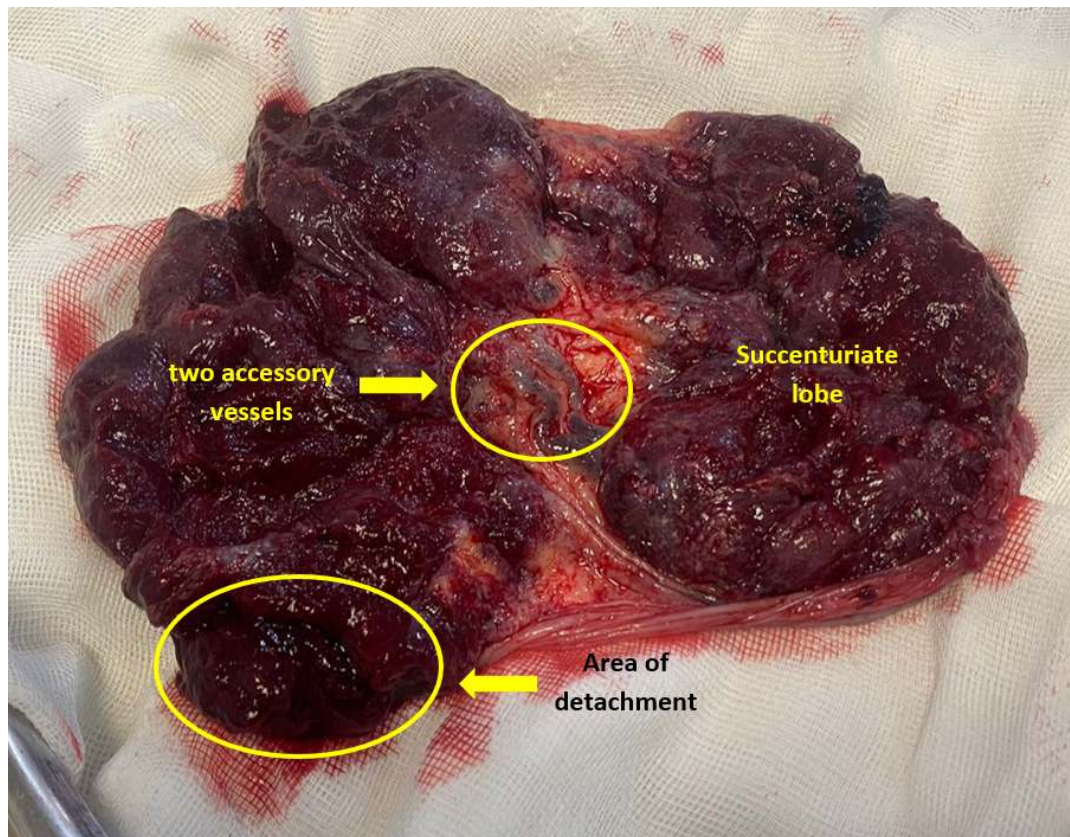


Figure 4. Macroscopic view of the maternal face of the placenta: succenturiate lobe with two vessels on the membranes and marginal detachment zone