

Contact intraoperative ultrasonography during Caesarean section in cases with suspected placenta accreta

T.Yarygina, T.Zabelina, S.Gadjieva, Y.Churlovskaya, D. Kotsuba, R. Shmakov.

Objectives

To evaluate the benefit of contact intraoperative ultrasound (IOUS) during cesarean section (CS) in patients with suspected placenta accreta.

Methods

A total of 28 patients with suspected PAS were operated on in a tertiary reference center, May 2024-March 2025. After laparotomy, contact IOUS was performed directly on uterine serosa using a sterile biplane probe 12-5 MHz BK5000 (GE Healthcare) to determine the location of the placenta in order to 1) avoid placental incision and massive bleeding and 2) choose the type of uterus incision, either a) one transverse incision above the placenta or b) a fundal incision to extract the fetus with subsequent suturing and a repeated incision to remove areas of abnormal invasion and metroplasty.

Based on intraoperative findings, the topographic type of invasion (T0-T5) was determined according to the Palacios - Jaraquemada JM classification.

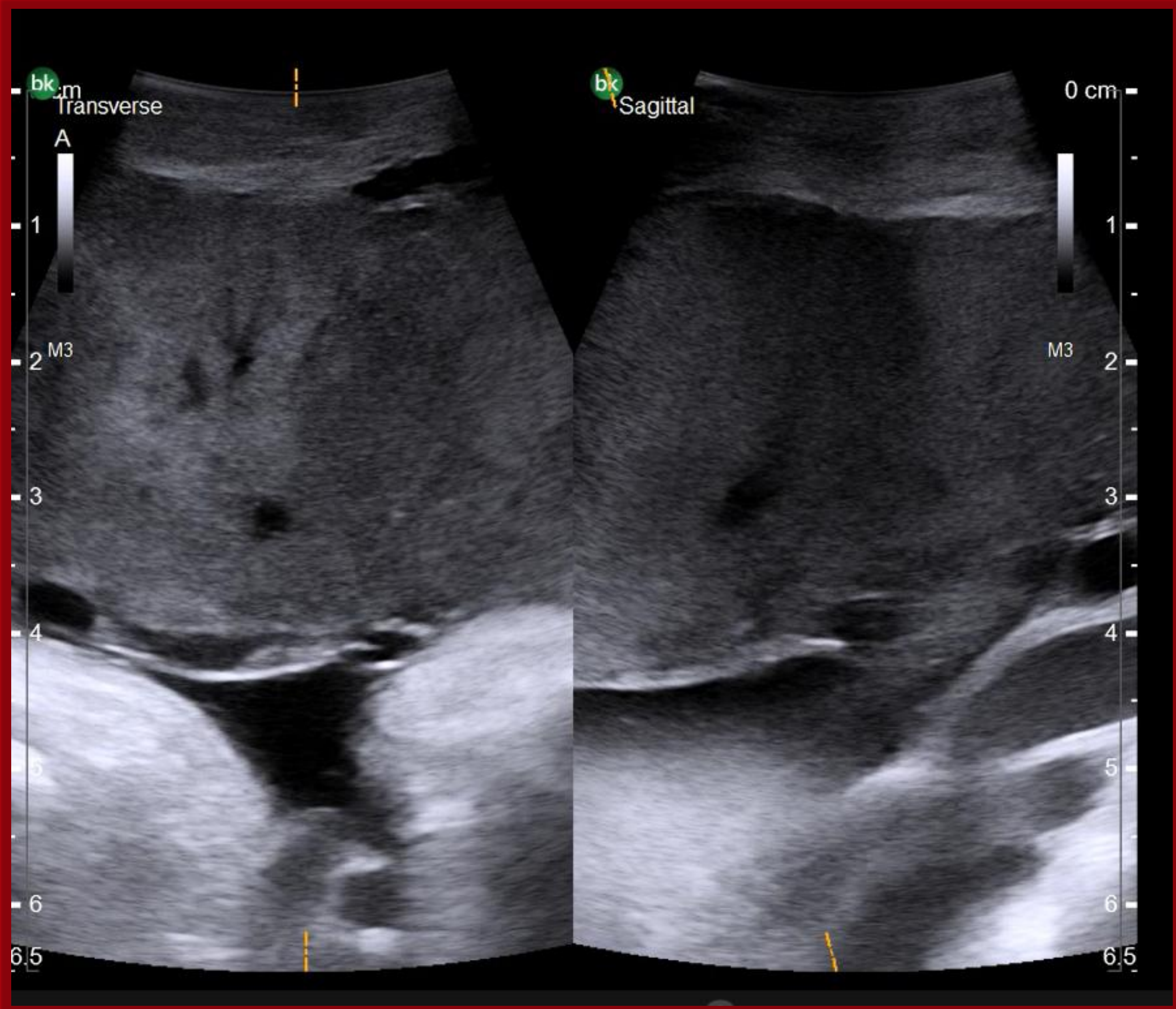
Results

In all cases, organ-preserving surgery was performed. 22 (78.6%) were elective CS. The 6 (21.4%) emergency CS cases were due to onset of labor (3 patients), bleeding (2), and severe preeclampsia (1). In the overall cohort, the median (IQR) of the gestational age at time of surgery was 35 (35 - 36) weeks; total blood loss was 1151 ml (736-1900 ml).

Cases were divided by T0-T4 classification as follows: 3 (10.7%), 14 (50%), 2 (7.1%), 6 (21.4%), and 1 (3.6%), respectively. Two patients had a combination of T2+T5 (3.6%) and T3+T5 (3.6%).

IOUS allowed avoidance of placental incision in all cases and identified all cases of T0 - uterine scar dehiscence and absence of abnormal placental invasion.

In 8 (28.7%) cases, IOUS facilitated one transverse uterine incision, including in one patient with dichorionic twins, both with anterior placentas and PAS FIGO type 3b with severe fibrosis (T4 type).



CONCLUSION: In cases with suspected placenta accreta, contact intraoperative ultrasound is a valid aid to the surgeon for identifying the types of abnormal placenta invasion and choosing the optimal place for uterus incision.