بسم الله الرحمن الرحيم

Cesarean scar pregnancy

- Ectopic pregnancy is estimated to occur in 1 to 2 percent of pregnancies Over 90 percent are located in the fallopian tube remainder implant in locations such as the abdomen, cesarean (hysterotomy) scar, cervix, and ovary Given the rarity of implantation at these sites, much of the information surrounding diagnosis and treatment of these pregnancies has been derived from small observational studies and case reports.

- MYOMETRIAL/CESAREAN SCAR PREGNANCY Pregnancy in a previous cesarean (hysterotomy) scar occurs in approximately 1 in 2000 pregnancies and accounts for 6 percent of ectopic pregnancies among women with a prior cesarean delivery The incidence does not appear to correlate with the number of cesarean deliveries

- [7:05 AM, 7/17/2021] .: The pregnancy is located in the scar and is surrounded by myometrium and connective tissue. The mechanism for implantation in this location is believed to be 1.migration of the embryo through either a wedge defect in the lower uterine segment 2. A microscopic fistula within the scar[7:12 AM, 7/17/2021] .: Purported risk factors :Adenomyosis, In vitro fertilization, previous dilation and curettage, manual removal of the placenta

- Clinical manifestations : In symptomatic patients, the clinical presentation ranges from vaginal bleeding with or without pain to uterine rupture and hypovolemic shoDiagnostic evaluation : women of reproductive age with abdominal pain, uterine bleeding, or menstrual abnormalities should be tested for pregnancy. Once pregnancy is established, the location of the pregnancy (intrauterine or extrauterine) is typically made by ultrasound examination. A high index of suspicion is important for making a diagnosis of cesarean scar pregnancy. A low, anteriorly located gestational sac should raise concern for a possible cesarean scar pregnancy .ck

Cesarean scar pregnancy at 6 weeks: Transabdominal ultrasonography

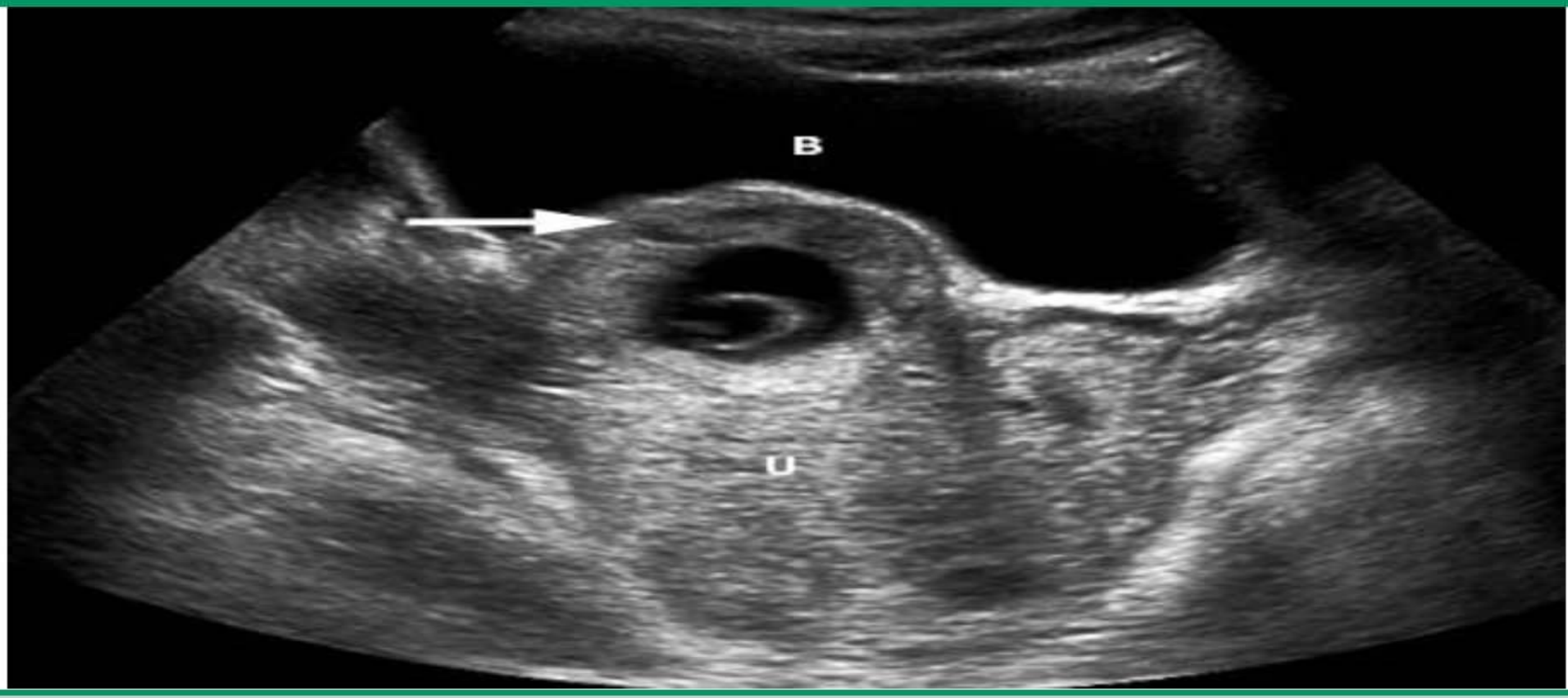

Image shows a retroflexed uterus (U) with gestational sac (arrow) deforming the bladder (B).

- Differential diagnosis : cervical ectopic pregnancy placenta accreta . low implantation of an intrauterine pregnancy.
- Treatment :The optimal treatment for a cesarean scar pregnancy is unclear and therapy should be tailored to the patients' clinical presentation.
- Treatment should be tailored to the individual patient. Desire for future fertility, size and gestational age of the pregnancy, and hemodynamic stability should be considered when determining a treatment plan.

- Expectant management is not recommended because : The risk for severe complications in the second and third trimesters ranged from 50 to 100 percent in case reports and small case series But it may be considered in the setting of fetal demise

- A patient who shows signs of hemorrhage or hemodynamic instability will require surgical intervention. This may include laparoscopy or laparotomy, or possible hysterectomy. In the stable patient, therapy may involve dilation and curettage or methotrexate therapy. A combination of local injection under ultrasound guidance and systemic methotrexate was found to be effective in a series of 26 cases of cesarean section scar pregnancy . However, there is insufficient evidence to suggest that this approach is more effective, or conversely, associated with more complications.

- Disadvantages of medical therapy are: slow resolution of the pregnancy (which can take months), with risk of rupture and hemorrhage; hysterectomy may be necessary. For example, a study of 101 individuals with cesarean scar pregnancy treated with ultrasound-guided methotrexate injection reported a mean time to human chorionic gonadotropin (hCG) resolution of 40 days (range 21 to 140 days).

- Advantages of surgical resection : It provides an opportunity to both remove the pregnancy and repair the defect, avoids the risk of hemorrhage from rupture if medical therapy fails. UAE has been used to : reduce the risk of subsequent hemorrhage in patients who are to undergo conservative surgery or methotrexate injection. Dilation and curettage as first-line therapy, without UAE, can result in perforation and catastrophic hemorrhage . In a randomized trial, 72 women with cesarean scar pregnancy who underwent suction curettage were pretreated with either UAE or systemic methotrexate .

- UAE pretreatment was associated with significantly decreased blood loss (37 versus 416 mL) and length of hospitalization (12 versus 40 days). Therefore, consideration for placement of UAE catheters in advance of surgical intervention may be warranted. Patients who desire future fertility should be counseled regarding the risks of pregnancy after UAE.

- A relatively new approach is use of hysteroscopy to remove cesarean scar pregnancies under direct visualization . In a series of five cases, only one had bleeding requiring intrauterine Foley tamponade and one required methotrexate for plateaued serum hCG levels. Hysteroscopic management has been described with ultrasound and laparoscopic guidance.

- Second trimester cesarean scar pregnancies are rare. As in advanced tubal ectopic pregnancies, medical treatment of second trimester cesarean scar pregnancies probably has a much lower success rate than medical treatment of first trimester cesarean scar pregnancies. Therefore, we suggest surgical management of advanced cesarean scar pregnancies and consider medical treatment an investigational approach

- Outcome :Some of these pregnancies may be partially implanted in the uterine cavity and proceed to term, while others implant deep in the scar and are predisposed to rupture in the first trimester. In a series of 10 patients who chose to continue their pregnancy, all required hysterectomy at the time of delivery for placenta percreta .In subsequent pregnancies, recurrent scar implantation may occur . There are reports of successful term pregnancy after a cesarean scar pregnancy however, uterine rupture (resulting in maternal or fetal death) and placenta accreta have also been reported. .Patients should be counseled about the probable weakened nature of the cesarean scar and should undergo repeat cesarean delivery between 34+0 and 35+6 weeks of gestation]. Early ultrasound should be performed in subsequent pregnancies in order to establish the location of implantation.

با تشکر از توجه شما