Supplement 1: Accreta policy at our center

TJUH DEPARTMENT POLICIES & PROCEDURES

Policy No:

Effective Date: 6/25/2015

Revision Date: 10/10/2017

DEPARTMENT NAME: OB Guidelines Committee

Category: MFM

Title: Accreta Protocol: Jefferson Accreta Center of Excellence (JACE)

Policy Owner: A. Roman

Contributors/Contributing Departments: MFM, GYN oncology, Transfusion medicine

PURPOSE

To develop a standardized process to management placenta accreta

PROCEDURE

PLANNED DELIVERY:

OUTPATIENT PROCEDURES:

1. MFM and GYN ONC consultations as outpatient
2. Outpatient Anesthesia and ICN consult. Urology consult as needed.

3. IR consult as needed, although generally not necessary to see patient preoperatively. IR will need to be informed at the type of procedure. An order needs to be placed **IR arteriogram embolization.**

4. Prenatal care and ultrasounds with MFM; add patient to Obstetric Complex Care Coordination list

5. Betamethasone administration, to be timed for being steroid complete at delivery

6. 3rd trimester MRI if posterior placenta or concern for percreta

7. Delivery timing – 34 0/7- 35 6/7 (ACOG) **consider as far as 36+6 in some clinical scenarios after discussion with the patient and MFM**

- Schedule through OR scheduler to verify OR room. If preop IR balloons are planned please inform her that in order for IR to get the case covered**- order will need to include CPT code 3743**
- Make sure Labor and Delivery is aware of scheduled accreta case
    a. Cesarean hysterectomy in main OR on 7 Gibbon (preferably room 31 or 37)
    b. Arrange for Cell Saver
    c. Notify blood bank of planned procedure 1 week to 2 days prior

B. INPATIENT PROCEDURES:

1. Admit the day before
2. Check consents to make sure they are within 30 days
3. Type and Cross – 4 units pRBC, 2 FFP
    a. Blood bank to be notified
    b. Order the blood products one day before the case, not same day
    c. Anesthesia to have access to ROTEM (hemacue), on site coagulation testing device
    d. Discuss with anesthesia and primary surgeon amount of blood to have in the room
    e. Coordinate with OR to have cell saver in the room
4. Clear liquid diet/consider bowel preparation if concern for bowel involvement

5. If patient with accreta is in house, coordination should be made with main OR in order to have an OR available with appropriate case carts nearby in case of emergent delivery.

C. DAY OF SURGERY:

1. Labor and Delivery for IV placement and epidural catheter placement at 6am, dependent on Anesthesia team and nursing availability

2. Fetal heart monitoring before IR

3. Preop for IR by 7am. They will call for patient as first case.

4. Heparin 5000u SQ x1 - needs to be given prior to going to IR. **Heparin only to be given if getting balloons place and must be given post epidural placement**

5. Tylenol 950mg, lyrica 150mg - needs to be given prior to going to IR

6. IR – preop balloon catheters

7. Transfer directly from IR suite to main OR

8. Fetal heart monitoring after IR, once patient gets to OR

9. Antibiotics prior to start of case. See below for Ancef dosing and guidelines for penicillin allergy:

Procedure	**Preferred Antibiotic**	**Dose/Concentration**	**Infusion interval**	**Time before anticipated incision**	**Re-dose in OR**
GYN (HYST, Oncology)	Cefazolin	2gm (<120 kg) 3gm (>120kg)	3-5 min push	Within 1 hour	Q4 hours
PCN / Cefazolin Allergic or MRSA + implanted device:					
GYN (HYST, Oncology)	Gentamicin AND	1.5mg/kg	30 min infusion	Within 1 hour	NA
	Clindamycin	900mg	20 min infusion	Within 1 hour	Q6 hours
If laboring or ruptured > 4 hours (in addition to above antibiotics)					

	Azithromycin	500mg	1 hour infusion	NA (may be given after incision)	NA

10. Assign a “runner” to go back and forth between the blood bank

11. Cell saver in room

12. Make SICU team aware of possible admission

13. Assign a team member (who is not scrubbed) to inflate IR balloons after delivery of infant/deflate balloons after hysterectomy complete

D. INTRA-OP:

1. General Anesthesia or Epidural depending upon the patient’s situation and reviewed by the Anesthesiologist.
Regional anesthesia preferred before delivery of baby; then possibly general anesthesia as per gyn onco and anesthesia preference
2. Positioning: Lithotomy in Allen stirrups, with careful positioning of legs with **no hip flexion** if IR balloons
3. SCD’s
4. Tranexamic acid 1,000 mg IV to be given 15 minutes prior to skin incision
4. Urology – open-ended ureteral catheters if needed
5. Vertical skin incision; hysterotomy individualized based off of placental location
6. Balloons to be inflated immediately after cord clamping
7. C-section, evaluate need for hysterectomy
8. Hysterectomy

E. POST-OP:

1. IR Balloons to be deflated, timing dictated by oncologist or primary surgeon
2. SICU- if necessary, decided intraoperatively which level of care is appropriate
3. Heparin prophylaxis, IV Pepcid if NPO
4. Possible post op embolization with IR, if clinically relevant

5. IR to remove balloons postop either in recovery area by IR residents or fellows with 20 minutes of manual compression. Patient to lie flat for 6 hours as per IR protocol.

F. EMERGENT DELIVERY:

1. Indications: NRFHT, preterm labor, hemorrhage.

2. Assess patient on Labor and Delivery

3. Decision for delivery will be made on L & D

4. Delivery in Main OR

a. If Main OR unavailable within 30 min or Category 3 tracing (or any neonatal indications), deliver on L & D

5. Back up residents and attendings may be called in to help on L & D if necessary
6. CALL OR CHARGE NURSE TO GET OR
7. Assign staff to collect instruments as listed below in checklist
8. Call:
    a. MFM Attending/Fellow
    b. Gyn Onc Attending (MFM Attending to call)
    c. Neonatology
    d. L&D Charge
    e. Urology (if percreta)
    f. Blood bank- order 4u PRBC and 2 u FFP/ if no time for cross matching, initiate Massive Transfusion Protocol. **More units may be ordered at the discretion of the provider**
    g. Administer Tranexamic acid 1,000 mg IV, preferably 15 minutes before skin incision
    h. Assign a “runner” to go back and forth to blood bank
    i. Anesthesia
    j. IR- in case of post-operative embolization
    k. Call for cell saver (OR will call them in)

l. Do not move patient from L and D OR to Main OR for hysterectomy

IN CASE OF SEVERE DISEASE: An individualized delivery plan will be developed. Included plans may include:

1. If disease is severe, i.e. requiring colostomy, nephrostomy tubes due to reanastamosis of the ureters, etc. Plan to leave placenta in situ.
2. After OR, to IR for gel foam embolization
3. After discharge will follow with MFM for weekly ultrasounds
4. High potential for infection, need for hysterectomy at a later date

ADDITIONAL INFORMATION

CONTACT NUMBER LIST

(numbers and names have been removed for publication)

OR Scheduling:
OR charge:
Blood bank:
Urology:

Neonatology:

IR:
IR Resident/Fellow on call cell:
L and D Charge:

Cell Saver:

Supplement 2: Additional demographic information

Demographic	Pre-protocol n=17	Post-protocol n=22	p values
Prior term deliveries: 0	1 (6%)	0	0.36
1	9 (53%)	8 (36%)	
2	4 (24%)	8 (36%)	
3	1 (6%)	5 (23%)	
4	1 (24%)	1 (5%)	
5	0	0	
6	1 (6%)	0	
Prior preterm deliveries: 0	14 (8%)	17 (77%)	0.26
1	2 (12%)	3 (13%)	
2	1 (6%)	2 (9%)	
Race			0.23
Asian	0	3 (14%)	
African American	6 (35.3%)	1 (5%)	
Caucasian	10 (58.8%)	17 (77%)	
Not specified	1 (6%)	1 (5%)	
Ethnicity Hispanic	2 (11.8%)	0	0.09
Previous miscarriage or abortion	10 (59%)	7 (77%)	0.09
Number of previous miscarriages or abortions			0.14
1	10 (59%)	7 (77%)	
2	1 (5%)	7 (77%)	
3	2 (12%)	4 (18%)	
4	2 (12%)	3 (14%)	
5	0	1 (5%)	
6	2 (12%)	0	
Patient had previous D&C ≤15 weeks	2 (12%)	8 (36%)	0.07
Patient had previous D&E >15 weeks	3 (18%)	3 (14%)	0.78
Chronic hypertension	3 (18%)	1 (5%)	0.14
Pregestational Diabetes	1 (6%)	1 (5%)	0.78
Gestational Diabetes A1, A2	0	1 (5%)	0.40

Data reported as Mean±SD or n (%)

Abbreviations: D&C, dilation and curettage; D&E, dilation and evacuation