

Morbidity Associated with Non-emergent Hysterectomy for Placenta Accreta

Enrico Camporesi M.D.^{1,3}, Rachel Karlnoski PhD^{1,3}, Devanand Mangar M.D.^{1,3} and Mitch Hoffman, M.D.²

¹Florida Gulf-to-Bay Anesthesiology, Tampa General Hospital, Tampa, FL

²Department of OB/GYN, University of South Florida, Tampa, FL

³Department of Surgery, University of South Florida, Tampa, FL

BACKGROUND

Placenta accreta, a rare but increasingly common complication of pregnancy, has been associated with significant maternal morbidity. Antenatal diagnosis has contributed to the overall drop in maternal morbidity and mortality that has been associated with this condition¹. We report our multi-year experience with non-emergent hysterectomy for suspected placenta accreta.

METHODS

After IRB approval, we performed a retrospective analysis of data from 29 patients admitted to our medical center with confirmed diagnosis of placenta accreta/increta/percreta between January 2003 and January 2008. All cases were identified through the medical records department and labor and a delivery records search using ICD-9 codes and search words (placenta accreta, cesarean hysterectomy). Prophylactic iliac arterial balloon catheters and/or ureteral stents were placed at the discretion of the attending physician.

Table 1. Patient Characteristics (n=29)

Characteristics	Measure
Mean age, y ^a	33.4 (23-43)
Mean parity, n ^a	3.2 (1-8)
Mean Gestational age, wk ^a	33.2 (26-39)
Mean Previous cesarean delivery, n ^a	2.3 (1-6)
≥2 previous cesarean deliveries, n	
Placental Location	18
Complete previa	21
Low anterior	8
^a Data are given as mean (range)	

RESULTS

Patient characteristics are shown in Table 1.

- Eighteen of the 29 patients had received at least 2 prior c-sections. Diagnosis was suspected on ultrasound in 26. Although cesarean section was completed at an earlier date than originally planned (median of 2 weeks), in no case was it emergent.
- Fourteen of the 29 patients had prophylactic placement of bilateral iliac artery balloon catheters (6 common iliac, 8 internal iliac) for the purpose of controlling hemorrhage.
- Utilization of the catheters was highly variable: the balloons were never inflated in 7, inflated prophylactically in 2, and inflated upon the onset of intraoperative hemorrhage in 5.
- Due to the inconsistent placement, location and utilization of these occlusive catheters it is not possible to attempt analysis of their effectiveness from the present study.
- Mean operative time for the cesarean hysterectomies was 216 minutes (range: 100-400 minutes).
- Mean and median estimated blood loss for the cesarean hysterectomies was 4061 cc and 3000 cc respectively (range: 500-30,000 cc).
- Twenty-one (72%) patients received a blood transfusion during or after surgery. Twelve of these received four or more units of blood and severe coagulopathy developed in 5, requiring component therapy.
- Four patients required re-operation within 24hr bleeding.
- Overall mean length of stay after surgery was 9.8 days (range: 3-31).
- Fourteen patients required ICU admission to the intensive care unit for a mean of 2.75 days (range: 1-8)

Table 2. Major Morbidity

Variable	n
Transfusion ≥ 4 units blood	12
Coagulopathy	5
Ureteral injury	2
Reoperation	4
Infection	0
Thromboembolism	3
Catheter-related	1
Fistula	0
Death	0

CONCLUSION

Antenatal diagnosis of placenta accreta allows a standardized protocol which includes multiple disciplines (maternal-fetal medicine, neonatology, anesthesiology, nursing, interventional radiology, blood bank, gynecologic oncology): general anesthesia is a requirement. Elective cesarean hysterectomy for placenta accreta is still associated with significant morbidity related to hemorrhage and urinary tract injury. The lack of mortality in our series is likely due to antenatal suspicion followed by careful communication.

REFERENCES

¹ Eller A, Porter T, Soisson P, Silver R. Optimal management strategies for placenta accreta. BJOG 2009; 116: 648-654
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