**Table D-63. Evidence table for studies addressing management of PPH (Touboul 2008)**

| **Study**  **Description** | **Intervention** | **Inclusion/Exclusion**  **Criteria & Population** | **Outcomes** |
| --- | --- | --- | --- |
| Author:  Touboul et al.,  200864  Country:  France  Enrollment period:  Jan 1998 to Jan 2002  Birth setting:  Hospital  Facility characteristics:  University teaching hospital  Funding:  None to report  Design:  Case series | **Intervention:**  Selective arterial embolization (SAE)  Prior to SAE:  Management for vaginal delivery: bimanual uterine exam, removal of retained placental parts, inspection for laceration or tears; surgical tears repaired prior to SAE.  For cesarean delivery: abdominal ultrasound to verify absence of retained placenta pieces and rule out hemoperitoneum. Medical management d uterine massage, i.v. oxytocicin up to 55IU, and sulprostone (first injection 500 µg over an hour and second injection 500 µg over 4 hours).  12 (11.7%) at their hospital and 90 (88.3) transferred from other obstetric units  **Groups:**  **G1:** SAE  N:  **G1:** 102  Duration of treatment: NR  Timing of treatment: Following procedures as listed above.  Order of treatment: NR  Length of follow-up: NR | **Operational definition of PPH:**  Severe PPH: blod loss > 1500 cc and either hemodynamic shock (defined by need for continuous perfusion of vasopressors) or disseminated intravascular coagulation (platelet count < 50,000 per mm3 , elevated prothrombin time defined as greater than twice the control values, hypofibrinogenemia, defined as less than 150 mg/dl and a prothrombin rate < 50%) or both.  **Definition of success of treatment**: Uterine preservation  SAE effective: 73 (71.5%) 14 required second embolization during 1st 24 hours  Surgery required: 29  **Method of blood loss measurement:** Collection bag placed at end of delivery. For transfer patients added estimated blood loss evaluated by medical team of hospital of origin.  **Severity:** NR  Inclusion criteria:   * Women with life threatening PPH who underwent SAE * Either gave birth at hospital or were transferred from other institutions that did not have ICU or vascular imaging unit   Exclusion criteria: NR  **Maternal age, yrs, mean ± SD:**  **G1:** 31.8 ± 5.9 (21-45)  **Parity, n:**  **G1:** 2.01 ± 1.11 (1-6)  **Weeks gestation, n (%):**  **G1:** 38.3 ± 2.9 (28-42)  **Single pregnancy:** NR  **Multiple pregnancy, n (%):**  **G1:** 4 (3.9)  **Race/ethnicity:** NR  **BMI:** NR  **Baseline hemoglobin:** NR  **SES:** NR  **Mode of birth, n:**  Vaginal  **G1:** 82 (79.4)  Forceps: 28/81 (34.5)  Cesarean  **G1:** 22 (20.6)  **Risk factors:** NR  **Primary etiology of PPH, n (%):**  Atony  **G1:** 44 (43.1)  Cervical or vaginal tears  **G1**: 20 (19.6)  Abnormal placentation including placenta accrete and percreta)  **G1:** 14 (13.6)  Vaginal thrombosis  **G1:** 11 (10.7)  Intrauterine retention  **G1:** 7 (6.8)  Placental abruption  **G1:** 4 (3.9)  Repaired uterine rupture  **G1:** 2 (1.9) | **Harms pre-specified:** No  **ICU admission:** 100% post procedure    **Mortality: G1:** 2  **Harms, n (%):**  Cardiogenic pulmonary edemas related to hemorrhage  **G1:** 5  Transient renal failure  **G1:** 7 (1 patient developed cortical necrosis and end stage renal failure)  Myocardial ischemia  **G1:** 3  Ischemia of lumbar plexus  **G1:** 1  Gluteal pain (4 months)  **G1:** 1 |