Department of Anesthesiology
Perioperative, Critical Care
and Pain Medicine

Impact and Anesthetic Considerations of Breast Cancer in the Pregnant Patient

William C. Grant DO, Regina Fragneto MD, Neva Lemoine MD, James Damron MD, Stephen Ford DO

Background

- Breast cancer is the most common malignancy diagnosed during pregnancy worldwide
- Metastatic breast cancer during pregnancy presents unique challenges
- Overlapping pregnancy-related physiologic changes and cancer-associated organ dysfunction
- Malignant metastases to the spine can present challenges to neuraxial anesthesia

Pregnancy Physiology

- ↓ Functional residual capacity
- ↑ Oxygen consumption
- Hypercoagulability

Cancer Consideration

- Spinal metastases → neuraxial risk
- Hepatic metastases → altered hepatic blood flow & anesthetic tolerance
- Chemotherapy → immunosuppression

SOAP 2026 ANNUAL MEETING
MONTRÉAL, QUÉBEC, CANADA APRIL 29-MAY 3, 2026

Department of Anesthesiology
Perioperative, Critical Care
and Pain Medicine

Impact and Anesthetic Considerations of Breast Cancer in the Pregnant Patient

William C. Grant DO, Regina Fragneto MD, Neva Lemoine MD, James Damron MD, Stephen Ford DO

Case Presentation

- 33 y.o. G3P2 at 27 weeks with Stage IV metastatic breast cancer
  - Metastasis to the spine and liver
- Multidisciplinary Concerns
  - Spinal metastases raised significant concern for difficult neuraxial placement and increased risk of adverse events
  - Patient with extreme discomfort lying flat
  - Hepatic metastatic involvement raised concern for deleterious effects on hepatic blood flow and function under general anesthesia
- Caesarean delivery at 28 weeks under GETA
- Radiation and chemotherapy initiated prior to discharge

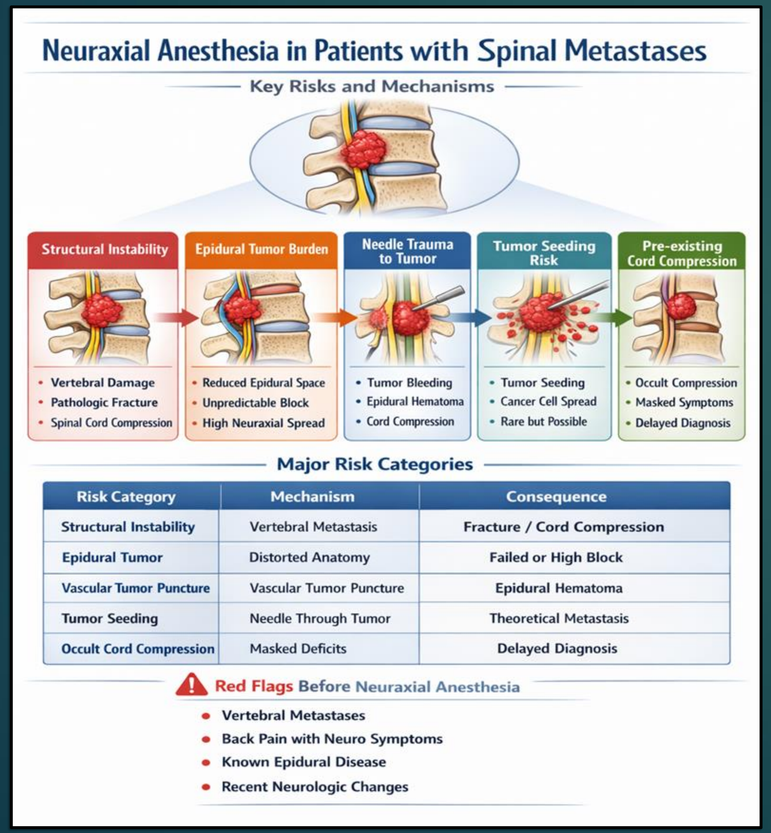
SOAP 2026 ANNUAL MEETING
MONTRÉAL, QUÉBEC, CANADA APRIL 29-MAY 3, 2026

Department of Anesthesiology
Perioperative, Critical Care
and Pain Medicine

Impact and Anesthetic Considerations of Breast Cancer in the Pregnant Patient

William C. Grant DO, Regina Fragneto MD, Neva Lemoine MD, James Damron MD, Stephen Ford DO

References



Discussion

Modality	Advantage	Disadvantage
GETA	- Bypasses tumor involved spine - Better for urgent interventions - Decreases adverse events in patients with spinal pathology	- Increased risk for airway complications and aspiration - Increased fetal drug exposure - Increased physiologic stress
Neuraxial	- Avoids obstetric airway concerns and aspiration risks - Provides excellent analgesia - Opioid sparing modality - Less fetal drug exposure	- Increased risk of vertebral damage secondary to metastatic processes - Can mask cord compression from mass effect

SOAP 2026 ANNUAL MEETING
MONTRÉAL, QUÉBEC, CANADA APRIL 29-MAY 3, 2026