

# Anesthetic Considerations for Labor and Delivery in Cancer Patients: A Review

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## Abstract

**Background:** The trend of postponing childbirth has led to an increased incidence of cancer diagnoses during pregnancy, including breast cancer, cervical cancer, lymphoma, ovarian cancer, and melanoma. Pregnant women with cancer are more prone to undergo planned deliveries, cesarean sections, and experience preterm births. This review addresses anesthetic considerations for labor and delivery in cancer patients.

**Method:** This narrative review was conducted by searching databases such as PubMed, Web of Science, SID, and Google Scholar for articles published from 2012 to 2023. The search utilized keywords such as "Cancer," "Pregnancy," "Anesthesia," and "Obstetrical Management" in both English and Persian. After evaluating for inclusion criteria and article quality, 134 articles were screened, with 30 meeting the eligibility criteria for this study.

**Results:** Regional anesthesia is frequently administered to symptomatic cancer patients during labor and delivery. However, it is contraindicated in patients with leukemia, brain tumors, or primary bone cancer and those with vertebral metastases. Patients who have undergone cancer treatment without presenting symptoms may receive standard anesthetic management akin to non-cancer patients. Notably, mediastinal tumors or metastases present significant life-threatening risks during anesthesia.

**Conclusion:** Anesthesia management during labor and delivery must be tailored to the cancer type, symptom severity, and extent of systemic involvement. Special attention is warranted for patients with lymphomas, leukemias, mediastinal and brain tumors, and metastases to the vertebral column, lungs, or liver.

**Keywords:** Cancer, Pregnancy, Anesthesia, Obstetrical management

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