## LETTER TO THE EDITOR

## Use of General Anesthesia and Sentinel Node Procedure During Pregnancy

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## **Dear Editor**,

We read with great interest a report by Broer et al. [1] on the management of melanoma during pregnancy. We agree that cancer treatment in pregnant women is a challenge though have a concern about recommendation of the resection of the primary tumor under local anesthesia and postponing the sentinel node procedure (SLN) after delivery.

We believe that treatment should adhere as much as possible to standard treatment, including for the treatment of melanoma.

The authors recommend the local anesthesia to avoid fetal risks according to two papers published in 1986 and 1990 [2,3]. Surgery during pregnancy is performed under local or general anesthesia after discussion with the obstetricians, surgeons, anesthetists, and pediatricians. Potential risks of surgery are linked to anesthetic agents but especially to complications during and after surgery: hypotension, hypoxia, hypoglycemia, fever, infection, and thrombosis. Therefore a left lateral tilt position, adequate analgesia, antibiotics, and thrombosis prophylaxia are recommended [4]. It is recommended to postpone the non-emergent surgery after the first trimester of pregnancy to avoid abortions and preterm labor [4]. In a series of 12,000 cases, Cohen-Kerem et al. [5] described an increased risk of fetal loss only after peritonitis. Van Calsteren et al. [6] described no increase of fetal malformation and fetal death after surgery under general anesthesia for several types of cancers and most of preterm deliveries are iatrogenic.

During pregnancy, most experience with the SLN technique has been gained in the field of breast cancer. The SLN technique with technecium for breast cancer is safe during pregnancy and does not increase risk of malformation and fetal death [7]. Fetal radiation does not exceed 0.05 mSV with technetium and 1 day protocol. The reason is that low dosages are used and that radioactivity is captured in the lymph node. The short termination half-life adds to low systemic exposure to radioactivity. The use of blue dye is avoided because of anaphylactic reactions risk and consequent risks for pregnant women and fetus [8]. We acknowledge that the oncological safety needs to be confirmed. In addition SLN for melanomas and vulvar cancer during pregnancy has been described [4,9,10].

Based on these data we believe that in most cases standard surgical treatment for melanoma is possible during pregnancy, including general anesthesia and the SLN procedure.

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