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CASE REPORT
Cosmetic

Surprise Baby: Abdominoplasty Performed During Unknown Pregnancy

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Summary: Abdominoplasty is a commonly performed procedure for patients after significant weight loss and in postpregnancy women. Stable weight and completed family planning are critical for optimal outcomes, as pregnancy postabdominoplasty can increase risks for both mother and fetus and potentially compromise aesthetic results. We present the first reported case of a patient undergoing abdominoplasty while unknowingly pregnant. A 40-year-old woman, 4 years postbariatric bypass surgery, presented for abdominoplasty with a body mass index of 28 kg/m^2. She had 3 children and had concluded her family planning. The surgery was performed without complications. Four months later, an unexpected pregnancy at 24 weeks was discovered. The patient developed gestational diabetes and hypertension but had no complications related to the abdominoplasty. The male newborn, delivered at 38 weeks, was small for gestational age but healthy. Ten years postsurgery, the patient maintained excellent aesthetic results with no abdominal complications. This case highlights that although family planning completion is recommended preoperatively to avoid complications, pregnancy postabdominoplasty can still result in favorable maternal and fetal outcomes. Although performing abdominoplasty on pregnant women is not advised, this case demonstrates that an undetected pregnancy during the procedure did not lead to adverse outcomes for the mother or child. *(Plast Reconstr Surg Glob Open 2024; 12:e6356; doi: 10.1097/GOX.0000000000006356; Published online 23 December 2024.)*

Abdominoplasty is a commonly performed procedure after weight loss and in postpregnancy women. A frequently cited contraindication is incomplete family planning due to increased risks during pregnancy for patient and fetus, as well as possible aesthetic side effects such as the development of stretch marks or weight gain leading to laxity or abdominal wall hernia.[1]

There is an ongoing debate regarding the potential risks associated with pregnancies following abdominoplasty. We present the first reported case of a patient who underwent abdominoplasty while being pregnant at 6 weeks of gestation, with neither the patient nor the surgeons being aware of the pregnancy at the time of surgery.

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CASE PRESENTATION

A 40-year-old woman presented to our department with excess skin after losing 50 kg (120–70 kg, body mass index 28 kg/m^2) following gastric bypass surgery performed 4 years prior. (**See figure, Supplemental Digital Content 1,** which displays a preoperative photograph of 6-week pregnant 40-year-old female patient showing excess abdominal skin after bariatric surgery and 50 kg weight loss, **http://links.lww.com/PRSGO/D661**.)

She reported having concluded her family planning after having 3 children (age 8, 10, and 12) and did not mention history of missed period. Preoperative abdominal wall ultrasound revealed no abdominal diastasis or hernia. (**See figure, Supplemental Digital Content 2,** which displays preoperative [A] and 10-year postoperative [B] ultrasound pictures of the abdomen with linear probe showing no pathologies like hernia or rectus diastasis, **http://links.lww.com/PRSGO/D662**.)

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Under general anesthesia, a horizontal incision was made above the pubic area, and dissection extended to the xiphoid. The resected tissue weighed 1375 g. The incision was closed without rectus muscle plication, and the umbilicus was reinserted. Operative and postoperative courses were uneventful. At her follow-up appointments 2 and 6 weeks after surgery, she reported high satisfaction and had maintained her weight, and no abdominal bulging was observed.

Four months later, during a routine gynecological examination, an unexpected pregnancy at 24 weeks was discovered, suggesting that the fetus was about 6 weeks old at time of surgery. During pregnancy, the patient developed gestational diabetes and gestational hypertension. The child's development remained normal, and no prenatal pathologies were identified. The male newborn was delivered 2 days after the 38th gestational week, measuring 48 cm and weighing 2480 g.

The patient did not experience any specific complications at the scar or abdominal wall during vaginal delivery. Additionally, she did not develop any new stretch marks on her abdomen after giving birth, and her weight remained consistent. A long-term follow-up for 10 years after surgery was performed. Photographs were taken, and a physical examination along with an abdominal wall ultrasound was conducted, revealing no signs of rectus diastasis or hernia (**Supplemental Digital Content 2, http://links.lww.com/PRSGO/D662**). The patient was still very satisfied with the outcome and reported no changes in tissue and scar after pregnancy. (**See figure, Supplemental Digital Content 3**, which display a postoperative photograph 10 years after abdominoplasty and pregnancy, **http://links.lww.com/PRSGO/D663**.)

DISCUSSION

Abdominoplasty is a surgical procedure designed to reshape and tighten the abdomen by removing excess skin and fat, often restoring rectus diastasis, especially after pregnancies. Weight stability and completed family planning are crucial for optimal outcomes, ensuring long-lasting surgical results and no possible negative impact on mother's and child's health during pregnancy and delivery.[2,3]

Only a few cases of abdominoplasties following shortly after pregnancies have been reported.[1–4] One case report by Alhumsi et al[4] documented a patient getting pregnant 1 month after abdominoplasty. No complications were reported during pregnancy or delivery for mother and child; though the scar darkened during pregnancy, it improved postdelivery.[4] Faessen et al[3] reported a 32-year-old woman who had an abdominoplasty with sublay mesh for rectus diastasis and became pregnant 1 year later. The pregnancy was uneventful, and a follow-up for 1 year after delivery showed a consistent aesthetic outcome with no signs of hernia or rectus diastasis on ultrasound.[3] Nahas[5] described a 25-year-old woman who had abdominoplasty and rectus muscle plication for a 2.8-cm rectus diastasis. She got pregnant 2.5 years later and had an uneventful delivery. A 15-month follow-up computed tomography scan showed no recurrence of rectus diastasis.[5] Borman[2] and Wallach[6] published cases of 2 women who became unintentionally pregnant 2 and 6 months after abdominoplasty with good aesthetic outcomes after delivery and no loss of abdominal wall tone.[2,6] All these cases show that pregnancies, even shortly after abdominoplasty, had a low complication rate, whereas the procedure maintained a high satisfaction rate. These reports are supported by a study by Sagie et al,[7] who retrospectively assessed the aesthetic outcome in women who became pregnant after undergoing an abdominoplasty in a voluntary online survey. They reported only a mild aesthetic compromise (new stretch marks, widened scar, excess skin, abdominal bulging).

A large retrospective study of 44,737 patients conducted by Karunaratne et al assessed 304 women with a history of abdominoplasty with a mean time between abdominoplasty and pregnancy of 3.75 years. A total of 9.85% of patients with a history of abdominoplasty had an increased risk of preterm delivery (<37 weeks) with a mean gestational age of 38.9 weeks, and 7.22% delivered newborns with low birthweight (<2500 g).[1] In comparison, the rate of low birth weight in the general population is 8.24% and the preterm labor rate is 10.09%.[8] Similar to this, our patient delivered a male newborn 2 days after the 38th gestational week who was within the second percentile, indicating small for gestational age. In the same systematic review, complications were documented in 136 patients across 14 studies. Of these, 21 were fetal/neonatal complications, with the most common being excessive growth in eight (5.88%) cases and fetal distress during labor in 6 (4.42%) cases. One hundred four maternal complications were reported, mostly linked to higher maternal age or comparable to the general population. No relevant complications regarding the abdominal wall's functional and aesthetic outcomes were documented. An ultrasound conducted 10 years after surgery in our patient showed no hernia or abdominal diastasis.

CONCLUSIONS

To our knowledge, we present the first case of pregnancy during abdominoplasty. Despite performing abdominoplasty on an unknowingly pregnant patient, there were no complications affecting mother, child, or aesthetic outcome. Moving forward, it is crucial to routinely inquire about menstrual cycles in women of childbearing age, with particular attention to irregularities, and to conduct pregnancy tests when needed. This particular case does not assure that all patients will have the same uneventful outcomes. Nonetheless, it shows that pregnancy after abdominoplasty is not a contraindication and can be safe for both mother and child.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

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