Is Lactation Really a Contraindication or an Unjustified Worry for Milk Fistula in Patients Undergoing Endoscopic Thyroidectomy via Breast Approach

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Abstract

Endoscopic thyroidectomy either by ipsilateral axillo-breast approach (IABA) or bilateral axillo-breast approach (BABA) has gained popularity as a minimally invasive technique, offering high cosmetic satisfaction and noninferiority to conventional thyroidectomy. In literature, lactation has been considered a relative contraindication of endoscopic thyroidectomy via breast approach due to fear of milk fistula formation. Milk fistula, an abnormal connection between a lactiferous duct and the skin, is a complication of radiologic and surgical procedures performed on the lactating breast. While the incidence of milk fistula remains relatively low, its impact on postoperative recovery, patient discomfort, and potential for infection necessitates proactive measures. Hence, a question arises whether lactation should be considered a contraindication for this approach of thyroidectomy. In our setup, we performed six cases of endoscopic thyroidectomy via breast approach in lactating females. Our study cohort had lactating females during 7–12 months of lactation and patients were followed up for a period of 3 months. None of them developed a milk fistula. The lower incidence reported in our study even after periareolar incision may arise from the fact that the plane of dissection was in subcutaneous space, thereby minimum alteration of breast anatomy was done. Although our experience is small but with this experience, endoscopic thyroidectomy seems a safe and feasible option. Larger evidence can be generated once we start using breast approaches in lactating female for endoscopic thyroidectomy.

Keywords: Endoscopic thyroidectomy, Lactation, Milk fistula.

Viewpoint

Endoscopic thyroidectomy either by ipsilateral axillo-breast approach (IABA) or bilateral axillo-breast approach (BABA) has gained popularity as a minimally invasive technique, offering high cosmetic satisfaction and noninferiority to conventional thyroidectomy in terms of surgical results or perioperative complications. In these approaches, a laparoscopic port is inserted through a circumareolar incision in the subcutaneous plane of the breast to enter in the subplatysmal plane of the neck. In literature, lactation has been considered a relative contraindication of endoscopic thyroidectomy via breast approach due to fear of milk fistula formation. Zhang et al. in their study described lactation as a contraindication to endoscopic thyroidectomy via breast approach due to a risk of mammary duct injury. Elzahaby et al. modified the location of the breast port and inserted it through a small incision on the upper breast border to avoid disturbing the breast parenchyma in lactating patients, in turn preventing milk fistula formation.

Milk fistula, an abnormal connection between a lactiferous duct and the skin, is a complication of radiologic and surgical procedures performed on the lactating breast. It has been reported following small-calibre procedures like fine needle aspiration (FNA) and core needle biopsy (CNB) to large-calibre procedures like surgical excision of breast masses. Variable incidence of milk fistula has been reported in the literature. While the incidence of milk fistula remains relatively low, its impact on postoperative recovery, patient discomfort, and potential for infection necessitates proactive measures. Moreover, lactiferous ducts exist most densely in the retroareolar region. Generally it is recommended to avoid periareolar interventions whenever possible to decrease the risk of fistula formation.

Hence, a question arises whether lactation should be considered a contraindication for this approach of thyroidectomy. In our setup, we performed six cases of endoscopic thyroidectomy via breast approach in lactating females. Our study cohort had lactating females during 7–12 months of lactation and patients were followed up for a period of 3 months. None of them developed a milk fistula. The lower incidence reported in our study even after periareolar incision may arise from the fact that the plane of dissection was...
in subcutaneous space, thereby minimum alteration of breast anatomy was done. There is evidence in support to this concept in an article published by Purkait et al. As per this paper, most of the ductolobular breast tissue lies deep to a thick white distinct fascia, called “premammary fascia” which demarcates the plane between subcutaneous tissue and the “actual ducto-lobular breast tissue”. Although our experience is small but with this experience, endoscopic thyroidectomy seems a safe and feasible option. Larger evidence can be generated once we start using breast approaches in lactating female for endoscopic thyroidectomy.

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References


