

Interesting Case Series

Inverted Nipples

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DESCRIPTION

A 30-year-old woman presents with bilateral inverted nipples. She relates that she had difficulty nursing her second child some 2 years ago. She has no palpable breast masses, no nipple discharge, no family history of breast cancer, and is otherwise well. She desires correction of her nipple inversion.

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QUESTIONS

- 1. What is the incidence of inverted nipples?**
- 2. How are inverted nipples classified?**
- 3. What surgical options exist for correction of inverted nipples and what are the main complications?**

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DISCUSSION

The incidence of inverted nipples has been variably reported as 3.5% to 10% in the female population. Inverted nipples can be psychologically distressing and can interfere with both lactation and breast-feeding. Most cases are acquired.

The Han and Hong classification system has been widely adopted because it has direct implications for surgical correction. Their classification is based on the intensity of nipple retraction and the degree of connective tissue loss beneath the nipple. Surgical correction, centers on release of nipple contracture and maintenance of soft-tissue bulk to maintain nipple projection. *Grade I*: The nipple is easily pulled out, and maintains eversion without traction. For correction, the nipple is manually everted and projection is maintained with a purse-string suture. *Grade II* (presented case): The nipple is difficult to evert and tends to retract once everted. There is moderate fibrosis and lactiferous ducts are retracted but not fibrosed. Vertical plane dissection is performed to release the fibrosis while avoiding damage to lactiferous ducts.

Grade III: The nipple is severely inverted and retracted and immediately retracts if everted. There is marked lactiferous duct fibrosis/retraction and marked loss of soft-tissue bulk. Retracted and fibrosed lactiferous ducts are carefully released, whereas nonretracted, functional ducts are maintained. Dermal fat grafts, laminated cartilage grafts, tendon grafts, and multiple variants of breast tissue and dermal flaps can be used to correct loss of soft-tissue bulk. Eversion is maintained with purse-string sutures, splints, or suction devices. Endoscopic release of contracture has been reported for Grades II and III.

The main complications of surgical correction are compromise of nipple vascular supply from areolar dermal bridges by either overaggressive soft-tissue dissection or excessive suture tension. If functional lactiferous ducts are inadvertently divided, patients may have difficulty with lactation. In addition, nipple sensation may be totally or partially lost postoperatively.

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