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# Use of Inguinal Hernia Mesh (DynaMesh-ENDOLAP) in Immediate Implant-based Breast Reconstruction

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## Abstract

**Introduction:** The rate of immediate implant-based breast reconstruction after mastectomy is increasing, and providing enough coverage for the implant is mandatory; however the choice of appropriate mesh for implant coverage is controversial. Considering the high cost and the limited availability of breast-dedicated meshes in our country, we conducted this study to investigate the consequences of using a polyvinylidene fluoride (PVDF) mesh designed for endoscopic and laparoscopic hernia repair (ENDOLAP) as a coverage for breast prostheses in breast reconstruction.

**Materials and methods:** A retrospective cross-sectional study was performed on data of patients who had underwent immediate implant-based breast reconstruction between 2012 and 2019. After skin sparing mastectomy and subpectoral implant insertion, the exposed lower and lateral parts were covered with the mesh.

**Results:** Seventy-nine reconstructions were performed on 62 patients. The average follow-up was 31.9 months (ranges 6-102 months). Postoperative complications including small flap necrosis (3.8%), seroma (8.9%), infection (5.1%), hematoma (3.8%), malposition (1.3%), rippling (1.3%), grade two and three capsular contracture (2.5%), and chronic pain (1.3%) occurred in 19% of the operated breasts. The complication rate requiring intervention was 5.3%, and no implant loss was observed. None of the patients who received radiation developed complications.

**Conclusion:** ENDOLAP mesh is a cost-effective and safe option for implant coverage in immediate implant-based breast reconstruction, with an acceptable complication rate.

**Level of evidence iii:** This journal requires that authors assign a level of evidence to each article. For a full description of these Evidence-Based Medicine ratings, please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266 .

**Keywords:** Breast Reconstruction; ENDOLAP; Implant-based; Mastectomy; Mesh; PVDF.

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