

## Confidence from a Benign Diagnosis of Ductal Papilloma Spares Patient Surgical Biopsy

### Summary:

This 41 year-old patient's mammogram revealed a small cluster of microcalcifications in the left breast. The lesion was classified a BIRADS IV and recommended for incisional biopsy.

However, since the calcifications were tightly clustered, an *Intact* BLES procedure was performed, withdrawing an 8mm by 12mm ovoid sample. Diagnosis (see back for details) was a ductal papilloma with fibrocystic changes, but absent malignant process.

When the sample is shredded, as in core biopsy, this structural information is lost, and the patient is often referred for surgical biopsy to rule out the possibility of DCIS—even when the pathologist is fairly confident that the defect is a benign papillary lesion.

In this case, the substantial cross section provided by the *Intact* specimen permitted review of the complete histopathologic architecture of the lesion as well as the microscopic structure. As a result, we were able to make a confident diagnosis that the lesion was not malignant, sparing the patient an open surgical procedure merely to confirm a benign diagnosis.

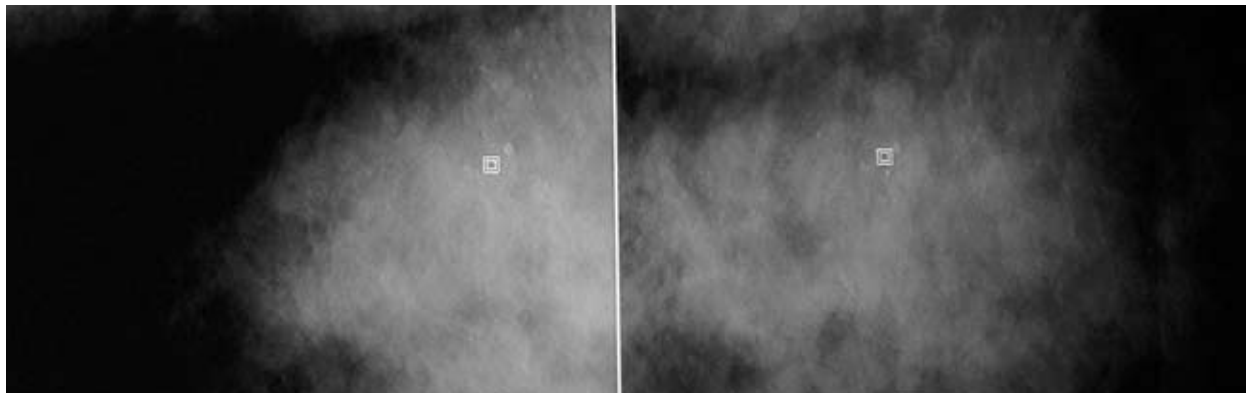
### Contributors:

#### Radiologist:

Carol A. Adami, MD  
*Boca Raton Women's Center*

#### Pathologist:

Frazad M. Esfahani, MD  
*Boca Raton Community Hospital*



Targeting images: Microcalcifications

### Patient:

- 41 year-old woman
- Presented for screening mammography

### Indication

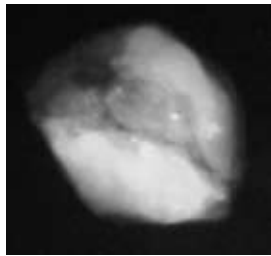
- Small cluster of microcalcifications in the left breast
- Lesion classified as BIRADS IV

### Method

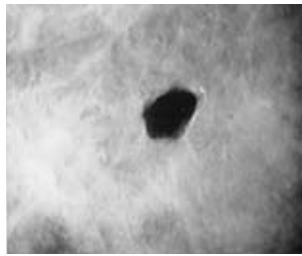
- Biopsy performed using *Intact* Breast Lesion Excision System (BLES). See reverse for complete procedure details.
- Procedure removed an ovoid specimen approximately 8mm x 12mm
- Post-procedure images as well as the specimen radiograph indicated that most of the lesion was removed

## Diagnosis

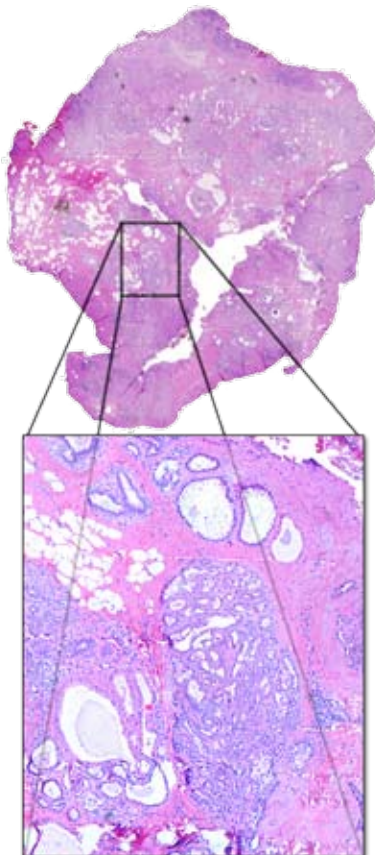
- Sclerotic and adenotic variant of a ductal papilloma with fibrocystic changes, including apocrine metaplasia; associated with microcalcifications
- Sections reveal somewhat fibrotic and elastotic breast tissue with rather crowded populations of heterogeneous ductal groups in a rather organoid lobulated distribution. Foci of adenosis also present. At times, ductular proliferation reveals sclerotic papillary type features involved by adenosis as well as apocrine metaplasia. These foci are also associated with microcalcifications.
- Histopathological architecture as well as the microscopic structure indicated no malignancy



Specimen radiograph



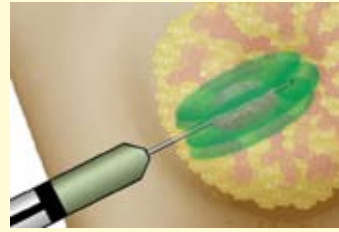
Post-capture image



Intact architecture of the sample permitted a confident diagnosis of ductal papilloma, with no signs of malignancy, sparing this patient from an unnecessary surgery to confirm a benign diagnosis

## The *Intact*<sup>™</sup> BLES Procedure

### Anesthesia:



- 3cc of Lidocaine<sup>®</sup> was applied in a skin wheal to anesthetize the area
- Another 20cc of Lidocaine<sup>®</sup> was injected in four quadrants to blanket the lesion. A fifth injection addressed the area behind the lesion and along the track to the lesion
- The Lidocaine was given 5 minutes to diffuse and take effect

### Procedure



- An 8mm incision was made in the surface of the skin
- Using introducers, the 10mm *Intact* wand was placed just under the skin surface
- The *Intact* wand was advanced in 3 to 5mm steps. RF energy enables it to glide through the skin with minimal pressure.
- A 8mm x 12mm specimen was captured and removed, intact, in a single pass
- The incision was closed with Liquid Band-Aid<sup>®</sup> and a Steri-Strip<sup>™</sup>
- The incision healed normally with little cosmetic effect