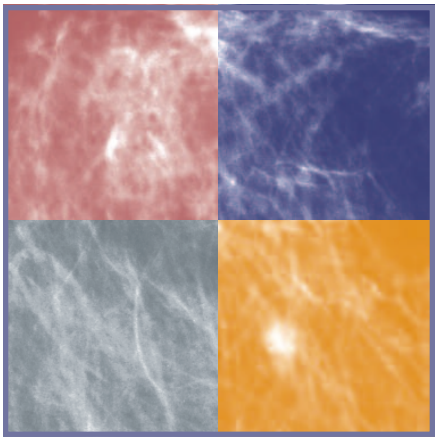
PAPILLARY LESIONS OF THE BREAST:

histologic examination of contiguous tissue can predict the need for surgical excision



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histologic examination of contiguous tissue can predict the need for surgical excision

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PURPOSE:

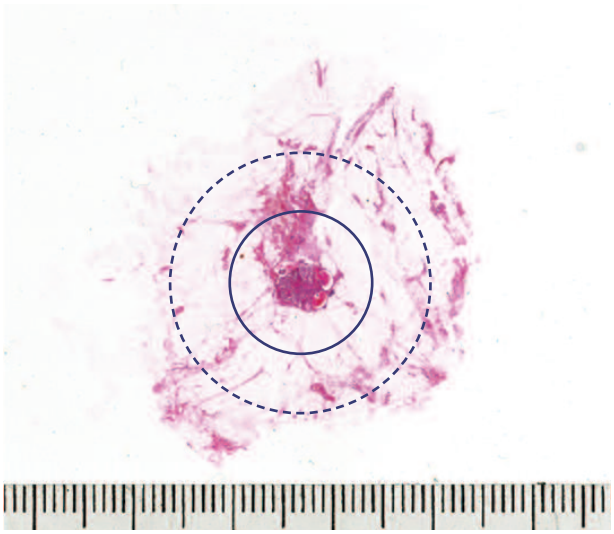
To determine whether some surgical biopsies of mammographically detected papillary lesions can be avoided following percutaneous removal of contiguous breast tissue by using 1.5 – 2 cm ***Intact***® biopsy device.

METHOD & MATERIALS:

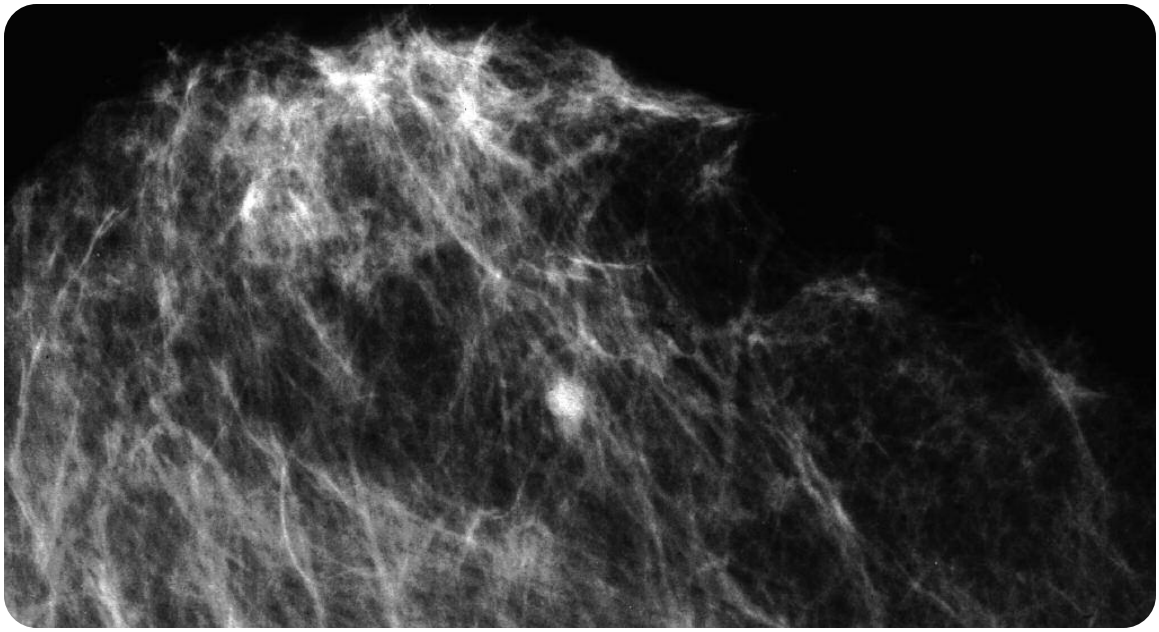
We conducted a retrospective mammography large section histology correlation study on 140 consecutive surgically removed cases of breast papillary lesions during the time period 1995-2003. This enabled careful analysis of the surrounding contiguous tissue divided into three concentric zones: ←1.0 cm, 1.0 - 2.0 cm and → 2.0 cm from the lesion margin. The presence and specific location of associated ADH/DCIS/LCIS was documented and correlated with any subsequent malignant lesions in the same breast during a follow-up period averaging 5.6 years. The material consisted of 94 benign papillomas, 14 of which had ADH/DCIS/LCIS in the vicinity of the benign papilloma; 11 atypical papillomas (benign papillomas containing foci of ADH or foci of DCIS/LCIS smaller than 3mm). Five of them also had ADH/DCIS/LCIS in the surrounding tissue; 22 "malignant papillomas/intraductal papillary carcinomas" (papillomas containing DCIS foci larger than 3 mm). 16 of them having DCIS in the surrounding tissue; 13 cases of intracystic papillary carcinomas, 10 of which also had associated DCIS in the surrounding tissue.

RESULTS:

1) Among the 80 benign papilloma cases with no associated epithelial cell proliferation one invasive carcinoma developed during follow up (1.1%). Among the 14 benign papilloma cases with associated ADH/DCIS/LCIS in the vicinity no subsequent malignancy was observed.
2) Among the 11 atypical papillomas, two invasive carcinomas developed in the ipsilateral breast, distant from the surgical biopsy site.
3) Three invasive cancers developed among the 22 cases of "malignant papillomas" (14.0%). One of these developed distant from the site of operation.



Two subsequent cancers occurred following surgery of the 13 intracystic papillary cancers (15.0%). One of these was several cm distant to the site of surgical biopsy



CONCLUSIONS:

Complete removal of benign papillomas should provide definitive therapy, since the subsequent occurrence of breast cancer (1.9/1000 woman-years) in this material was half of the expected cancer incidence. 80 out of the 140 surgical biopsies in this material could have been avoided using these criteria. When histology shows malignant papilloma(s) or intracystic carcinoma(s), wide surgical resection is recommended due to the high rate of associated DCIS and subsequent recurrences. We have begun a prospective confirmatory study by removing 1.5 – 2 cm contiguous tissue using the ***Intact***® device.

CORRELATION OF HISTOLOGIC AND IMAGING FINDINGS