Effect (SE) p-value

In ducts with:
• No NAF - Macrophage presence increased protein (p = 0.03) and estradiol (p = 0.053).
• Epithelial cell presence increased estradiol (p = 0.07).

It is well recognized that all breast cancers arise in the ductal lobular system. The local conditions concerning their relationship to the physiology of the breast itself. One theory postulates that carcinogenesis proceeds from a solitary ductal system, or a "sick duct," while the other attributes this phenomenon to "field defect." For in situ breast carcinoma, one studied ducts from breast tissue and another looked at whole breasts. These findings suggest that field defect results from breast ductal epithelial defects and influence other ducts in situ.

Current techniques for accessing the breast provide promise for identifying intermediate carcinogenesis proceeds from a solitary ductal system, or a "sick duct," while the other assumes that a general "field defect" gives rise to the cancerous cells. In previous studies hormone levels in NAF were examined but due to the pooling of samples and uninterpretable results, changes could not be attributed to an individual duct or breast. Establishing the hormonal and cellular composition within the distinct ducts is critical in determining whether the study of individual ducts and breast tissue will lead to any significant findings, which may yield results in terms of breast ductal fluid and estrogen influence other ducts in situ.

A previous study of ductal lavage in high risk women found estrone sulfate and progesterone levels were variable from duct to duct while estradiol levels were similar. We found that estrone sulfate was significantly decreased in nulliparous women (p = 0.02) and estradiol levels were not stable from duct to duct while estradiol levels were similar. This would suggest that estrogen levels are correlated within subjects while others vary duct to duct within the same subject. Because of this apparent lack of stability, analysis of hormone levels in NAF should be limited to small samples, since conclusions could change with additional subjects. Results from additional subjects are being analyzed. This poster includes an additional graph not shown above but not further analyzed since the original abstract was submitted.

References: