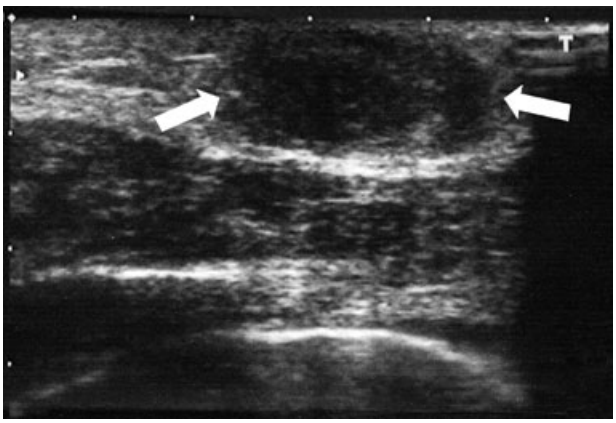

Figure 3. Baseline HR USG breast.

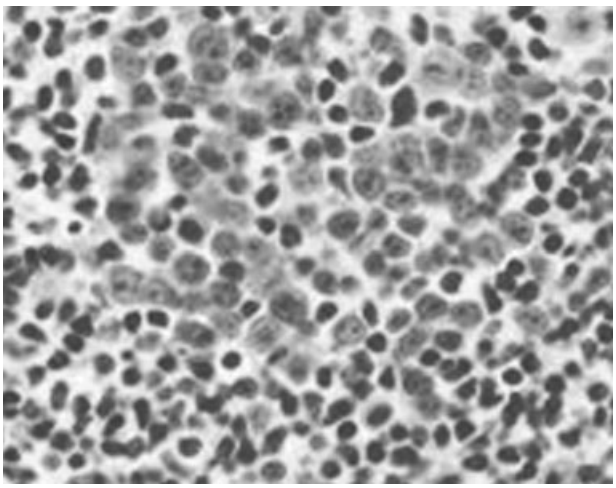

Figure 4. M/S picture of FNAC breast lump.

The characteristics of this disease, such as natural history, prognostic factors, and impact of treatment have not been yet well established. The presentation of PBL is very similar to that of a carcinoma. Even radiological differentiation is not possible. Generally, PBL shows no calcifications on mammogram and often shows a homogeneous faint tumor shadow without either microcalcification or spiculation. High resolution ultrasound usually reveals a hypoechoic mass with coarse internal echo. Tissue diagnosis is the mainstay for correct diagnosis.

A Case of Juvenile Papillomatosis, Aka "Swiss Cheese Disease"

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A 21-year-old woman presented with left breast pain and was noted to have a mobile nodule on physician-directed examination. Her past medical history included multiple sclerosis and obesity, and she had no significant breast cancer-related family history. Previous breast biopsies had revealed fibroadenomatoid and fibrocystic changes. Ultrasound (US) of the lesion revealed an irregular but circumscribed mass containing solid and cystic regions thought to possibly represent an atypical (cystic) fibroadenoma (Fig. 1).

The patient was elected to undergo excisional biopsy of the mass. Gross evaluation of the specimen revealed a 2.8 × 1.8 × 1.8 well-circumscribed nodule with diffusely cystic cut surfaces. Some of the cysts contained cloudy fluid, and there were scattered foci of chalky yellow-white fat necrosis. Microscopic evaluation revealed a well-demarcated lesion with an admixture of fibrocystic changes including multiple apocrine cysts, adenosis, ducts with prominent fibrovascular cores suggestive of benign intraductal papilloma, and prominent duct expansion by usual ductal hyperplasia. Chronic inflammation and foamy macrophages were present in areas of previous cyst rupture.

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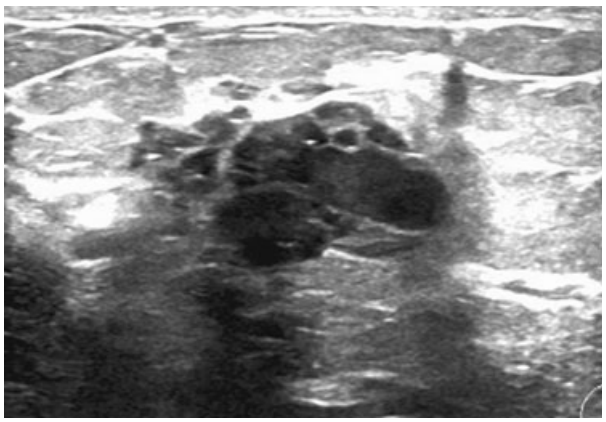

Figure 1. Ultrasound image demonstrating an irregular mass with circumscribed margins. Multiple areas of hypoechogenicity are present indicating cystic areas.

No significant architectural or cytologic atypia was present. These histopathologic features were characteristic of juvenile papillomatosis (JP) or "Swiss cheese disease" as it is sometimes referred to due to its multicystic appearance (Fig. 2).

Juvenile papillomatosis is an infrequently seen localized benign proliferative lesion typically identified in women less than 30 years of age. It is not unusual for patients to have a history of previous benign breast biopsies despite their young age. Clinical and imaging studies most often suggest fibroadenoma, albeit usually a somewhat atypical presentation for that diagnosis as seen in this case. Sonography is the most common mode of diagnostic imaging, primarily due to identification in this younger cohort. Imaging findings are characteristic but somewhat nonspecific, with United States demonstrating an ill-defined heterogeneous mass with multiple small cysts most prominent at the periphery of the lesion. Histopathology is characterized by a spectrum of benign proliferative changes that vary in proportion from case to case. The clinical, radiographic, and pathologic features outlined in this case are classic for this uncommon diagnosis.

Due to the relative infrequency of JP, prognosis is uncertain. Incomplete excision is thought to result in increased risk of recurrence, thus complete removal is recommended. Unless there is co-existing carcinoma (a very rare event), no further treatment is necessary. Positive family history for breast carcinoma, recurrence, and/or bilateral JP may portend increased future risk of breast cancer, and these patients may elect for risk-reducing mastectomy. Despite her lack of family history, this patient was contemplating such a procedure at the time of this report.

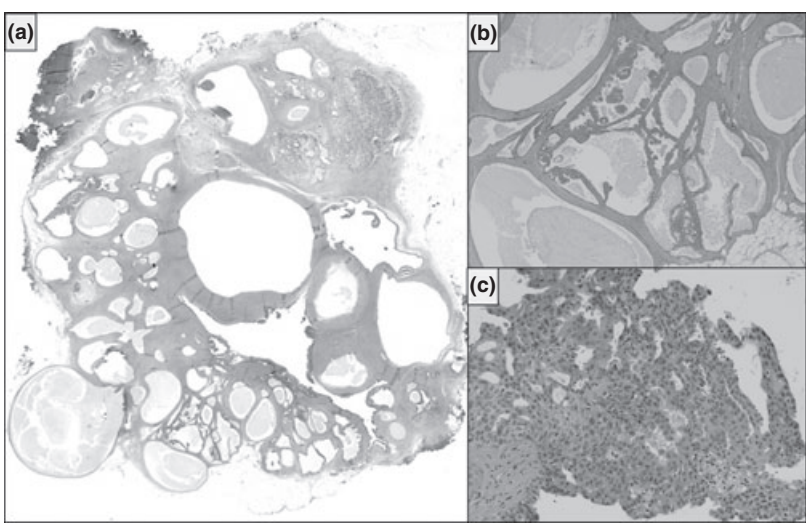

Figure 2. Whole-mount section from the excisional biopsy specimen showing multiple cysts interspersed with more solid regions, imparting a "Swiss cheese" appearance (a). Higher power images of the lesion including a cluster of simple and apocrine cysts filled with inspisated secretions (4×) (b) and ducts expanded by florid usual ductal hyperplasia with intermixed apocrine metaplasia (20×) (c; H&E).