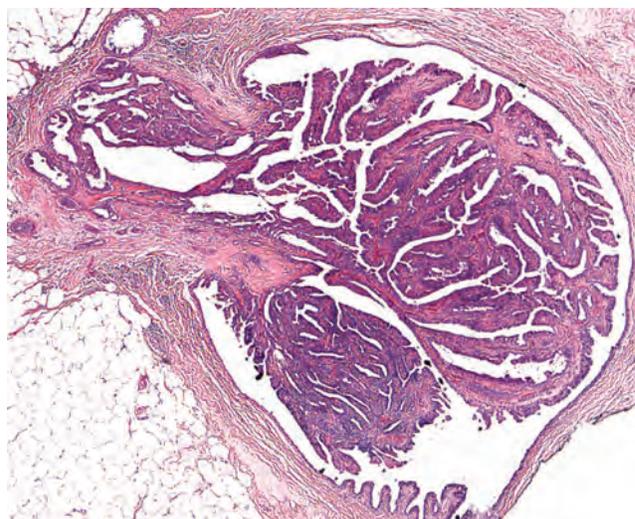


**Figure 23-9** Radial sclerosing lesion. **A**, The radiograph shows an irregular central mass with long radiodense projections. **B**, Grossly the mass appears solid and has irregular borders, but it is not as firm as an invasive carcinoma. **C**, The mass consists of a central nidus of small tubules entrapped in a densely fibrotic stroma and numerous projections containing epithelium with varying degrees of cyst formation and hyperplasia.

puberty, in the very aged, or at any time during adult life when there is cause for hyperestrinism. The most important of these is cirrhosis of the liver, since this organ is responsible for metabolizing estrogen. In older males, gynecomastia may stem from a relative increase in estrogens as testicular androgen production falls. Drugs such as alcohol, marijuana, heroin, antiretroviral therapy, and anabolic steroids have been associated with gynecomastia. Rarely, gynecomastia occurs as part of Klinefelter syndrome (XXY karyotype) or in association with functioning testicular neoplasms, such as Leydig cell or Sertoli cell tumors. Similar to proliferative disease in women, gynecomastia may be associated with a small increased risk of breast cancer.

### Proliferative Breast Disease with Atypia

**Atypical hyperplasia is a clonal proliferation having some, but not all, of the histologic features that are required for the diagnosis of carcinoma in situ.** It is associated with a moderately increased risk of carcinoma and includes two forms, atypical ductal hyperplasia and atypical lobular hyperplasia. Atypical ductal hyperplasia is



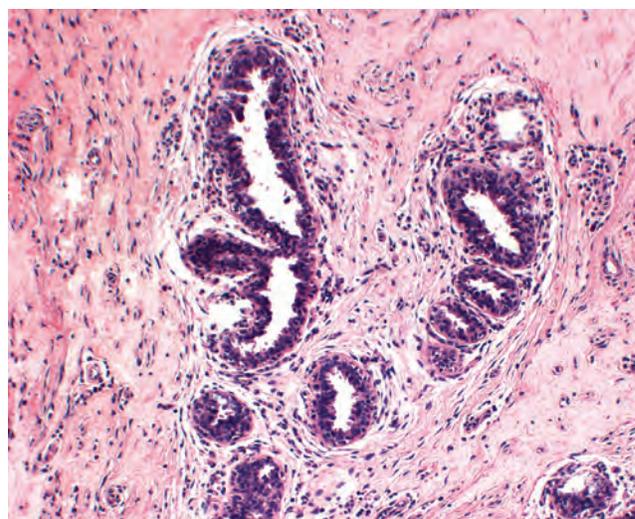
**Figure 23-10** Intraductal papilloma. A central fibrovascular core extends from the wall of a duct. The papillae arborize within the lumen and are lined by myoepithelial and luminal cells.

present in 5% to 17% of specimens from biopsies performed for calcifications. Atypical lobular hyperplasia is an incidental finding and is found in fewer than 5% of biopsies.

### MORPHOLOGY

**Atypical ductal hyperplasia** is recognized by its histologic resemblance to ductal carcinoma in situ (DCIS). It consists of a relatively monomorphic proliferation of regularly spaced cells, sometimes with cribriform spaces. It is distinguished from DCIS in that it only partially fills involved ducts (Fig. 23-12A).

**Atypical lobular hyperplasia** consists of cells identical to those of lobular carcinoma in situ (described later), but the cells do not fill or distend more than 50% of the acini within a lobule (Fig. 23-12B). In atypical lobular hyperplasia, atypical lobular cells may lie between the ductal basement membrane and overlying normal luminal cells.



**Figure 23-11** Gynecomastia. Breast enlargement in males is due to an increase in the number of ducts accompanied by loose cellular stroma. Lobule formation is absent.