

Answers to Medical Quiz

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- A. Fibroadenoma harboring ductal carcinoma in situ (DCIS). Adjacent mammary parenchyma shows DCIS with micro-invasion.

Figure 1: Hyalinized fibroadenoma with elongated and distorted ducts.

Figure 2: Fibroadenoma with comedo ductal carcinoma in situ (DCIS) within it.

Figure 3: Comedo DCIS with microinvasion adjacent to the fibroadenoma.

DISCUSSION

Fibroadenomas associated with other pathological entities are encountered in 50% of cases. The most common lesions are benign and they range from sclerosing adenosis, duct ectasia, apocrine metaplasia, florid fibrocystic disease and duct papillomatosis¹.

Malignancy is encountered in fibroadenomas, albeit, rare. Presence of carcinoma within fibroadenoma is usually a secondary involvement from adjacent carcinoma. Carcinoma arising de novo in fibroadenoma is rare. At least 225 carcinomas involving fibroadenoma are reported in the world literature. The presence of in situ carcinoma within fibroadenoma is associated with in situ carcinoma in the adjacent mammary parenchyma in about one-fifth of cases. Women with carcinoma arising within fibroadenoma are usually twenty years older than the expected incidence of the general female population².

A variety of histological types of carcinomas were described in fibroadenoma. This is predominated by lobular carcinoma in situ, followed by ductal carcinoma in situ and admixtures of both.

The higher frequency of in situ carcinomas as compared with invasive carcinomas within fibroadenomas, suggests that the progression of such lesions are halted due to early diagnosis of the readily palpable fibroadenoma.

The predominance of lobular neoplasia is explained by the fact that fibroadenomas are believed to originate from the lobules.

Comparative analysis studies of molecular alterations in fibroadenoma and adjacent breast carcinomas showed that there is no association between the two, as genetic alterations were only encountered in breast cancer and not fibroadenoma³.

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The management of patients with carcinomas arising in fibroadenomas should follow the current guidelines of breast cancer management. In a study conducted by Diaz et al, only one out of 26 women with in situ carcinoma within fibroadenoma who were treated conservatively developed invasive carcinoma in the ipsilateral breast².

The finding of fibroadenoma in women older than forty years of age is, therefore, an indication for surgical excision¹.

REFERENCES

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