

lymphadenopathy in the involved lymph nodes^{1,2}. Although many nodes in our study showed reactive changes and melanin pigmentation, features which usually suggest a skin disease—associated lymphadenopathy; only one patient had clinical evidence of this (*lichen planus*). We believe, therefore, that these nodes may become palpable in some patients without an obvious skin disease. It would be difficult to speculate about aetiology of the lymph node prominence in such patients, but the presence of melanin pigments and reactive hyperplasia raises the possibility of repeated minimal trauma particularly to the nipple or areola.

Intramammary lymph nodes may be detected on mammograms by the 'doughnut' sign, where fatty replacement at the hilum gives rise to an area of translucency or ring appearance⁵. As fatty infiltration was present in only 21 per cent of our cases (*Figure 2B*), mammography would not have aided diagnosis in most of these patients.

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Treatment of breast lumps in the teenager

V. Naraynsingh, G. C. Raju and K. Sieunarine

Department of Surgery and Pathology, General Hospital, Port of Spain, Trinidad, West Indies

Correspondence to: Mr V. Naraynsingh, 94 Eastern Main Road, Tunapuna, Trinidad, West Indies

The presence of a breast lump in any age group raises the fear of malignancy, and as a result it has been suggested that all solid discrete lesions in the breast should be excised¹. However, carcinoma is rare under 30 years of age and in one report no malignancy occurred under age 27 years². If the risk of malignancy is negligible, a conservative attitude may be considered in teenage patients with breast lumps. To decide if this approach is appropriate, we analysed all our breast biopsies in the 13–19 age group.

Patients and methods

We reviewed all breast biopsies at the Port of Spain General Hospital in female patients between 13 and 19 years old over the 7-year period from 1976 to 1982.

Results

Of 2642 consecutive breast biopsies performed, 658 (24.9 per cent) were in teenage girls. In this group fibroadenoma occurred most frequently (77.6 per cent) and, with fibrocystic disease, accounted for 97 per cent of teenage breast lumps; no cases of carcinoma were encountered (*Table 1*). Of our patients with fibroadenoma, 14 per cent either had undergone previous excision of a fibroadenoma or returned with recurrence during the study period. Of the 2642 breast biopsies, 529 were malignant, the youngest 2 women being 23 and 25 years.

Discussion

As in other series^{1,2} there were no malignant lumps in our teenagers. The majority of breast lesions were fibroadenomas; these occur more commonly and at an earlier age in our population, whereas fibrocystic disease (the commonest differential diagnosis) increases with age. The clinical diagnostic accuracy for fibroadenoma in all ages can be as low as

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Table 1 Histological diagnosis of breast biopsies in age group 13–19 years

| | |
|----------------------|------------|
| Fibroadenoma | 511 (77.6) |
| Fibrocystic disease | 130 (19.8) |
| Abscesses | 14 (2.1) |
| Fat necrosis | 1 (0.2) |
| Granular cell tumour | 2 (0.3) |

Figures in parentheses are percentages

50 per cent¹. However, in our teenage population the diagnostic accuracy is very high (92 per cent) because fibroadenomas occur very frequently in coloured races and the diagnosis can be made with more certainty in this young age group where fibroadenosis is uncommon and carcinoma is very rare. In the 8 per cent misdiagnosed, the histological diagnosis was always benign, usually fibroadenosis.

Although the growth rate of fibroadenomas may increase in pregnancy, and in adolescence a large size may be reached, growth is slow and often self-limiting; thus surgery can be delayed in most patients. Fibroadenomas are often multiple and after early excision 10–20 per cent of patients return with more fibroadenomas³. Most of these recurrences occur within 5 years of surgery. Therefore, an aggressive surgical policy will result in multiple operations in a significant proportion of patients, whereas observation could result in a single operation for multiple fibroadenomas. Spontaneous regression has been reported in 10 per cent of fibroadenomas⁴ and thus surgery may be avoided if an observation policy is instituted for teenage breast lumps. Malignant change within fibroadenomas is very rare, occurring on average 10 years after the mean age of women with fibroadenomas⁵; none of our cases showed evidence of carcinoma. The risk of a missed malignancy, or one arising in a fibroadenoma under observation, is minimal.

Fibrocystic disease, the next common cause of a breast lump, is best managed conservatively.

A conservative approach is now advised in the teenager, and fibroadenomas are now observed for 5 years before considering biopsy.

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