

BREAST MASSES IN ADOLESCENT PATIENTS IN IRAN

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There are very few reports on breast masses in adolescent patients (1,2,3). Published studies of breast lesions have not discriminated between the lesions found in adolescent and those in other age groups.

Adolescent is the period during which major changes occur in hormonal patterns(4), and this directly affects mammary tissue in both sexes. Most masses in adolescent breasts are inflammatory lesions or benign neoplasms (1-4).

There is a few but significant incidence of malignancy in this age group (6)

There is often considerable delay in seeking medical attention for breast masses in adolescent.

This may be due to embarrassment in seeking a physician's advice about a sensitive anatomic area or fear of malignancy enhanced by the current custom of self-examination of many adult patients and some adolescent.

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To determine the frequency of different breast masses in adolescent on whom surgery was performed, a retrospective study of adolescent admitted to the hospital for surgery was carried out.

MATERIAL AND METHODS

The Hospital records are of Emam Khomeini medical center and Sina Hospital of medical school of Tehran University.

All patients with breast masses admitted from 1972-1985 for surgery from age eleven to age twenty years (total 323).

In sixty-one male in our study, the greatest incidence of breast masses was at eighteen years of age (Figure 1), and all of them had histologic diagnosis of gynecomastia. The findings, on the 262 adolescent females are summarized in Table 1. The incidence per age is plotted in Figure 2 and revealed gradual increase through adolescent.

COMMENT:

Studies of breast masses in the literature have been concerned mostly with adults because of the greater frequency of serious disease (1-3).

They are do not recognize the significant incidence of breast problems during adolescent.

All adolescent males admitted for surgery in our study were found to have gynecomastia on histologic examination.

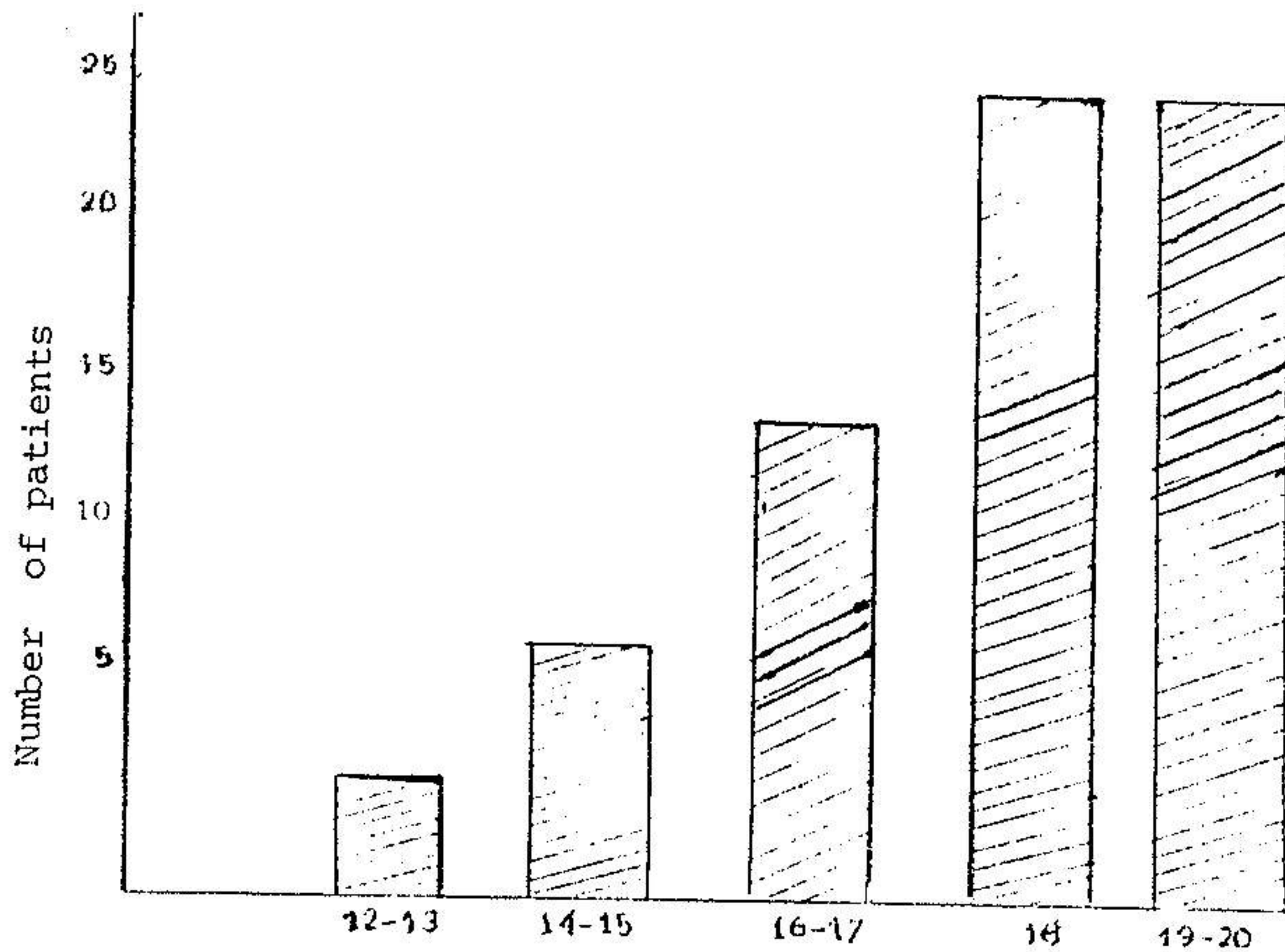


Figure 1. Incidence of adolescent male breast masses according to age.

They were all treated by excision for diagnostic and cosmetic indications.

The incidence of true neoplasms in the breast of adolescent male is low & none was found in our series. The risk of malignancy in adolescent male breasts, through extremely small, dose exist (7)

Table 1 adolescent breast masses in female patients

Diagnosis	Number of patients According to age(yr)										total%
	12	13	14	15	16	17	18	19	20	212	
Fubroadenoma	0	2	3	12	28	31	43	42	51	212	%80/9
Lactating adenoma	0	0	0	1	0	0	1	0	1	3	%1.14
Mammary displasia	0	0	1	0	2	1	2	1	2	9	%3.4
Ductal papilloma	0	0	0	0	1	1	1	1	0	4	%1.5
Fibrocystic disease	0	0	0	1	1	3	3	2	6	16	%6.1
Cystosarcoma phyllodes	0	0	1	0	2	1	1	2	1	8	%3
Stroma sarcoma	0	0	0	0	1	0	0	0	1	2	%0.7
Adenocarcinoma	0	0	0	0	0	0	1	2	5	8	%3
Total	0	2	5	14	35	37	52	50	67	262	%100

Although breast disease is thought of as primarily a female surgical problem, 18 percent of our adolescents having breast surgery were male.

The spectrum and incidence of breast masses in adolescent female were markedly different than in males. Fibroadenoma was the most common lesion (80/9 percent) in this series of 262 adolescent females, finding consistent with other surveys of adolescent breast masses (1-2).

The several largest series of adolescent breast masses in recent literature had no primary malignancies. In our study 15 cases had malignancies. This emphasizes the necessity of biopsy for all patient breast masses (6).

As a result of these findings, all breast masses in adolescent females that persist longer than one or two menstrual cycles are excised for histologic examination

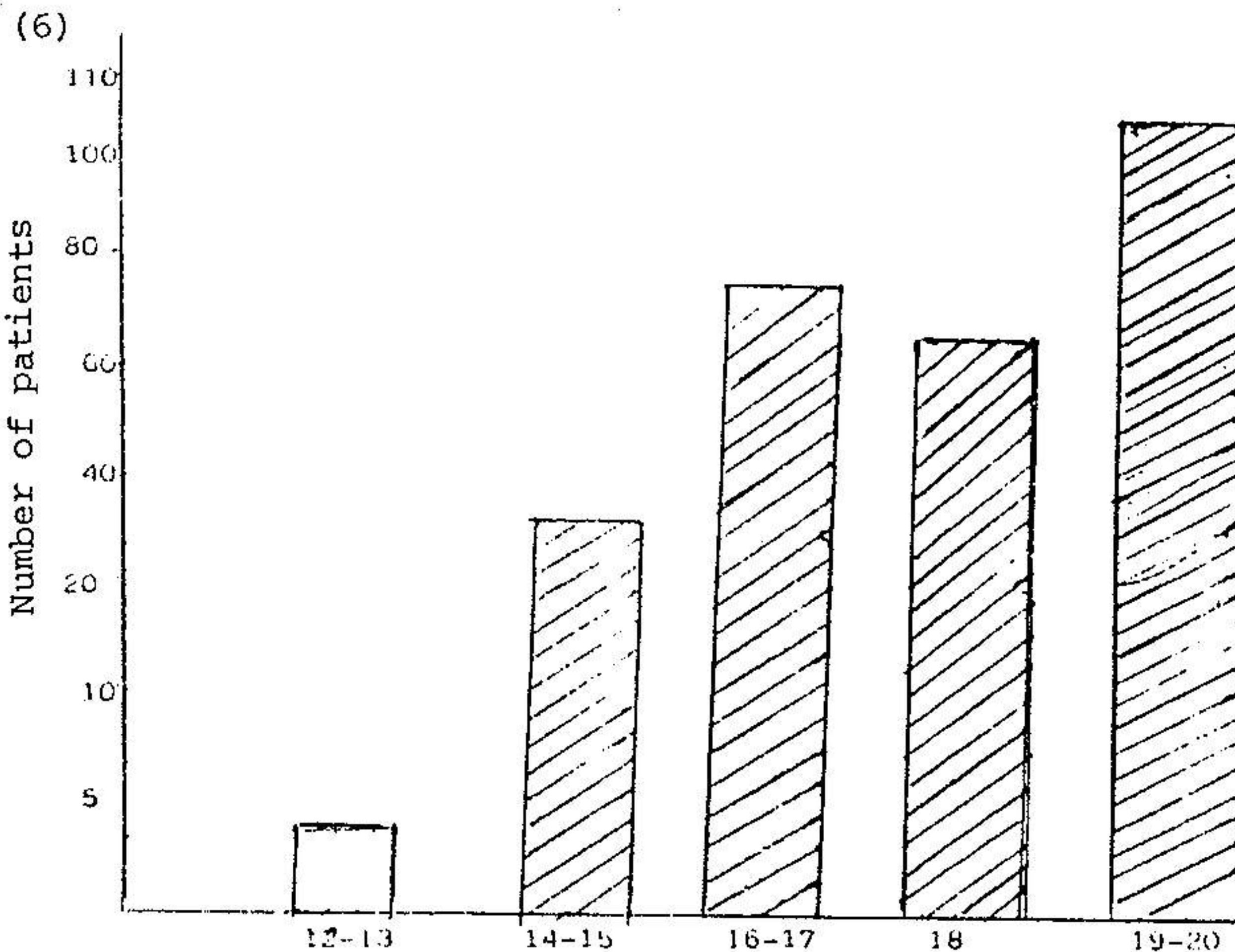


Figure 2. Incidence of adolescent female breast masses according to age.

SUMMARY

Breast masses in adolescent are common. In males, almost all are gynecomastia. Surgical intervention may be required for cosmetic and psychologic reasons. There appears to be little risk of malignancy in these patients.

In females, fibroadenoma are the most common breast masses. There are benign neoplasms that should be removed if persistent.

Fibroadenomas increase in frequency with age during adolescence. Careful observation and reassurance followed by surgical excision if the mass persists is recommended. Norris and Taylor in a series of 24 cases of cystosarcomas phyllodes encountered 3 cases being before 20 years of age. This is in contrast to our finding of so high incidence (8 cases between 12-20 years of age). (9)

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