

An overview of adolescents breast disorders

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Summary: Our investigation has confirmed the low incidence of mammarian pathology in adolescents and the near absence of malignant neoplastic pathology.

Programs of breast control in this age can be valid only by aiming at health education prevention and correction of eventual risk factors.

The group of adolescents studied by us has allowed us to define the most frequent pathology as the functional one, that is, mastodinia, and among the organic cases single or multiple fibroadenomas are the most frequent lesions.

An exact diagnostic profile is necessary in order to reassure the patient in cases of absence of pathology, or to schedule a follow-up or to program an eventual surgical and/or medical treatment.

Key words: adolescents; breast disorders; diagnosis.

INTRODUCTION

Breast disease presents a typology and distribution in the adolescent different from that in the other ages of life.

Breast cancer which represents the leading cause of cancer death among women, has a very low incidence during this age.

In fact, according to Central Institute Statistic data, it was observed that in the years 1972-87 the mortality for breast cancer was almost stationary in women aged from 9 to 19 years, fluctuating from 0.02 to 0.01%.

For this reason this age is excluded from breast cancer screening, which is, on the

contrary, necessary in the following ages. Therefore the diagnostic protocol of the adolescent is also different from that of older women.

We performed a retrospective study in the years 1984-89 to define what was the percentage and the reason of the first consultation of the adolescents who came to the Senologic Centre of the IInd Institute of Obstetric and Gynecologic Clinic of Rome University «La Sapienza».

We also evaluated the types of pathology, the incidence and the reliability of our diagnostic protocol.

MATERIALS AND METHODS

In our study we included all the patients aged between 9 and 19 years who self-referred to our Senologic Centre.

The diagnostic protocol included: anamnesis, thermography, and physical examination. We divided the patients into two groups: the asymptomatic who came for a control, and the symptomatic who came for a consultation because of

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lump, mastodinia, secretion, congenital anomalies, infection and trauma.

All the patients underwent a thermography and physical examination. Thermography was always performed in order to evaluate the indication and reliability of this method, particularly in cases of flogosis.

The physical examination allowed us to select pathologies or suspect cases.

Therefore according to the indications of the senologic investigations we performed ultrasounds in all adolescents with lumps or palpable abnormalities, the latter investigation was followed by a fine needle aspiration in all cases of limited lesion.

Cytologic investigation was performed in all cases of spontaneous or induced secretions.

All patients in our study were followed up after one and two years.

RESULTS

In the years 1984-89, 10790 patients referred for a first senologic consultation to the Senologic Centre of the IInd Institute of Obstetric and Gynecologic Clinic of Rome University «La Sapienza».

369 were adolescents aged between 9 and 19 years, representing 3.6% of the above total.

The reason of the consultation was the same as that in other ages even though in a different percentage distribution, except for 3% of congenital anomalies (Table 1).

Our diagnostic protocol allowed us to select, both in the group of asymptomatic and symptomatic, patients really affected by a breast disease.

The absence of pathologies was confirmed in 88.7% of asymptomatic adolescents, who came for a normal control (Table 2). Only 11.3% presented a lump which led to the diagnosis reported in Table 2.

The most frequent pathology was single or multiple fibroadenomas, which represented 80% of all cases, followed by cysts and adenosis.

In the symptomatic group the most frequent reason for senologic consultation was mastodinia followed by lumps, nip-

ple discharge, infections, traumas and congenital anomalies (Table 3).

The diagnostic procedure only allowed us to show the organic pathology and not the functional one, clinically represented by mastodinia.

Our diagnostic protocol allowed us to exclude the presence of pathology in 62.7% of symptomatic patients.

A pathology was diagnosed in 37.3% of this latter group with distribution and typology as reported in Table 4.

Also in this group the most frequent pathology was single or multiple fibroadenomas. 21.6% was represented by congenital anomalies.

These latter cases are only esthetic problems, since in almost all the cases the asymmetry is very evident. It was necessary to interview the patient in order to assure her that neither a benign nor malignant pathology was present and to plan the eventual plastic surgery.

Our diagnostic protocol allowed us to define the pathology and its distribution in the symptomatic and asymptomatic adolescents who came for a senologic consultation.

The follow-up at one and two years did not show the presence of false negatives and has confirmed the validity of our diagnostic protocol.

DISCUSSION

The adolescents of our study group represent 3.6% of the total first consultation in the years 1984-89.

In fact this age is far from the period at higher risk for breast cancer and is therefore excluded from the screening programs.

Our study confirms the low incidence of pathologies in this period of life and the lack of sensibilization of the adolescents to undergo controls.

These controls should be requested, to define the type of breast and to evaluate

Table 1. - Reasons of first senologic consultation of 369 adolescents (12-19 yrs) at the Senologic Centre of the IInd Institute of Ob/Gyn. in the years 1984-89.

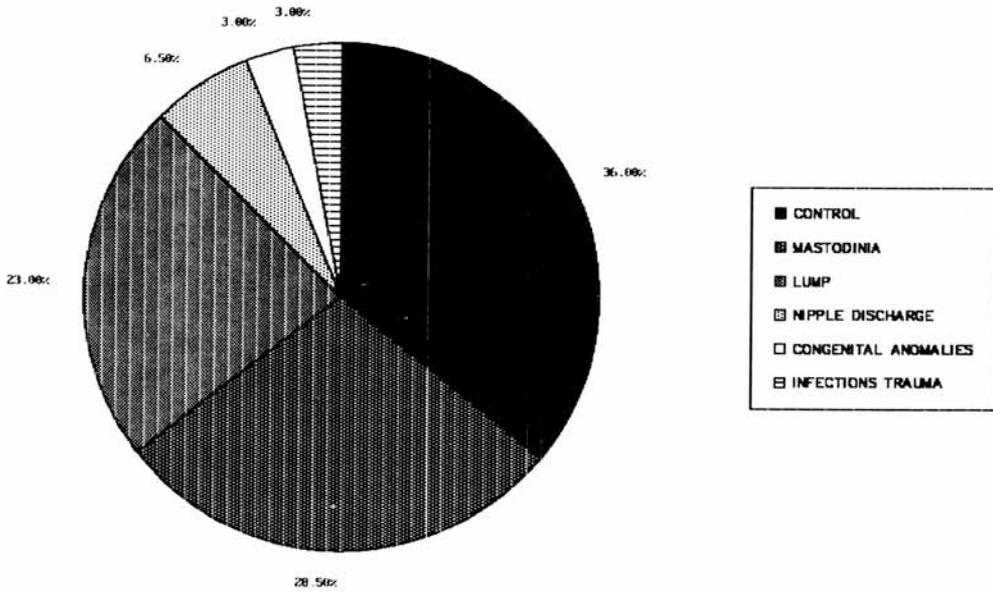


Table 2. - Pathologies in asymptomatic patients.

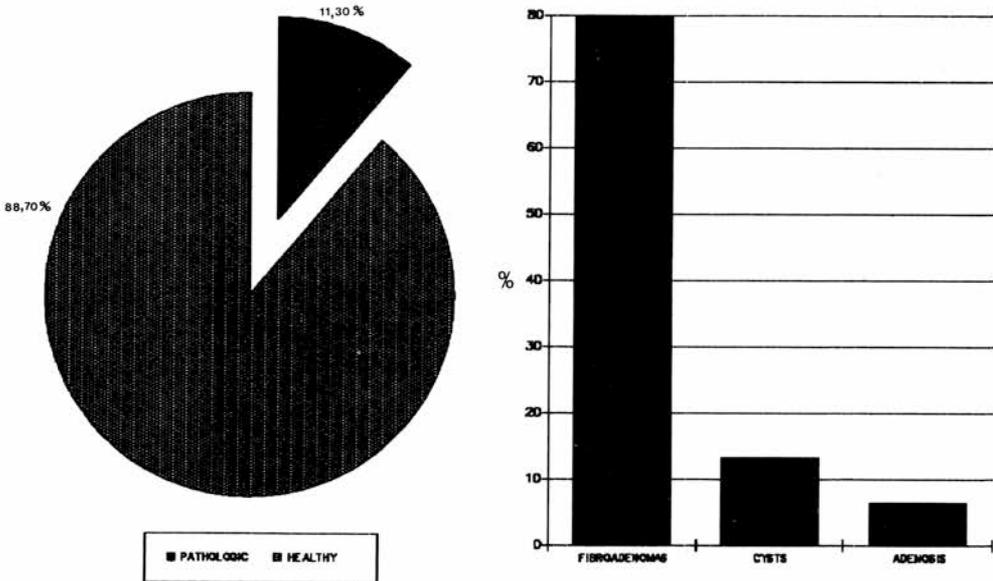


Table 3. - *Symptomatic.*

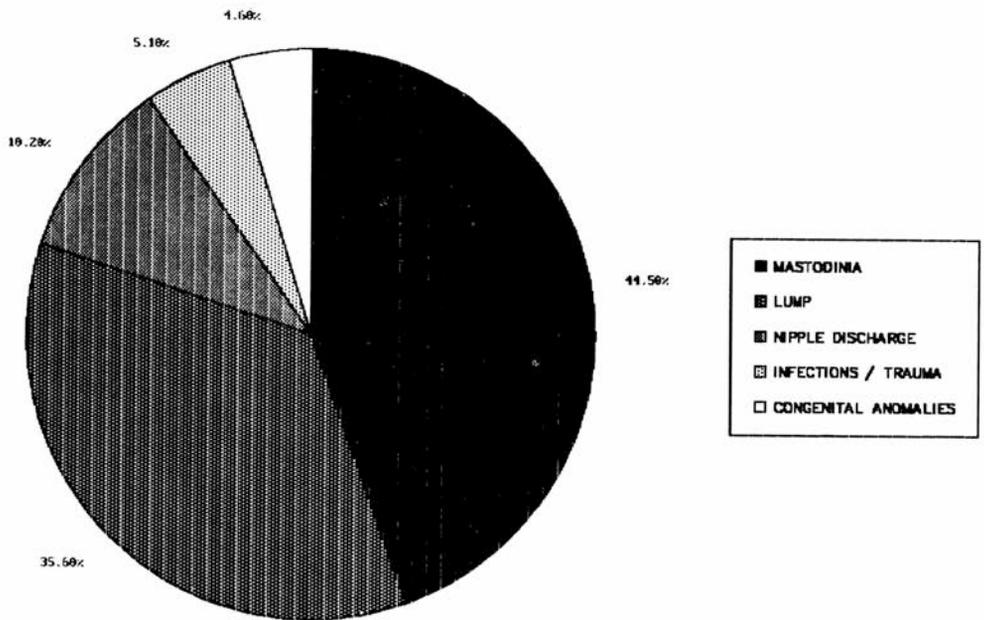
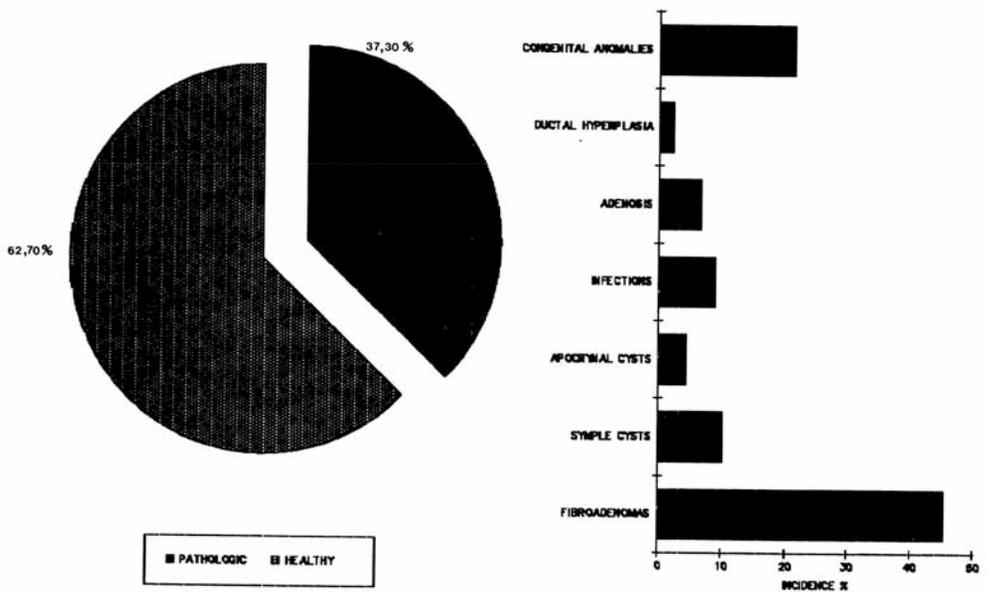


Table 4. - *Pathologies in symptomatic patients.*



after a clinical and ultrasonic evaluation, the presence of risk factors in order to organize programs of health education.

In fact the breast at this age could be the target of the risk factors and of eventual cancerogens which could reveal their effect in older age. Nutritional factors would mainly be involved in this process.

An unbalanced diet, causing overweight, could influence the menarche and endocrine development.

The absence of some nutritional factors, in particular the vitamins involved in the oxidation process, could influence the development of the mammary gland negatively predisposing it to future pathologies.

The higher incidence of functional pathology represented by mastodinia is, however, confirmed and among the organic cases, fibroadenomas being the most frequent lesions.

The diagnostic protocol we adopted, was adapted in order to reach more exact diagnosis in the adolescents we studied. In fact none of the cases needed a mammography.

This method at this period of life presents great limitations due to the density and difficulty of penetrating the mammary structure.

Its use is also unjustified from a cost-benefit point of view, because of the low incidence of malignant tumoral pathology.

The follow-up at one and two years of the patients studied has confirmed that the diagnostic protocol followed by us has allowed a 100% diagnostic accuracy in positive cases.

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