A frightened girl with a breast lump

A 17-year-old schoolgirl, about to take her ‘A’ level examinations, was seen in the breast clinic. She was crying and very upset. Her mother explained that the girl had found a lump in her left breast while showering a week ago and was convinced that she had cancer. This girl’s grandmother, on her mother’s side, had had a mastectomy 10 years ago. She remains very well and the girl is much attached to her. The patient was otherwise very well, an athlete and school prefect. Her periods had commenced when she was 13 and were regular. There was no other family history of breast cancer apart from her grandmother.

On examination, she was a healthy, but very upset, nervous and crying young woman. There was a highly mobile, rubbery, well defined 2 cm lump in the upper outer quadrant of her left breast. The right breast and the axillae were clear and no abnormalities were found elsewhere.

What would be your clinical diagnosis at this stage?
The age of the patient and the physical signs make the diagnosis of a fibroadenoma of the breast a very near certainty. The nickname of ‘breast mouse’ fits well with this mobile little firm lump.

What are the pathological features of this condition, and what is its age distribution and natural history?
The fibroadenoma arises from a breast lobule. It is encapsulated and is made up of fibrous tissue surrounding epithelial duct proliferation (Fig. 97.1). It was formerly classified as a benign neoplasm, but it is now regarded as an aberration of normal development. Quite often bilateral or multiple fibroadenomas may occur. There is no increased risk of malignant change and the majority will disappear over a number of years. It is commonly found in teenagers, but it is seen rarely in middle-aged or even elderly women.

What would be your management of this very frightened girl?
She requires reassurance, but, as with every breast lump, the diagnosis must first be established without doubt. Although mammography is a standard investigation in older women (35 years plus), it is less valuable in young people, where the breast stroma is dense, and was therefore not ordered in this case. Instead she underwent an ultrasound and core biopsy.

The diagnosis confirmed – what now?
The patient was told that she had an entirely benign lump that would not be of any danger to her and which would probably disappear if left alone. However, the girl was terrified by her lump and wanted to get rid of it. She was therefore admitted shortly afterwards to the day surgery unit and the lump removed under a general anaesthetic. It shelled out easily through a small circumareolar incision, which leaves a near invisible scar. Figure 97.2 shows the exercised specimen.

Figure 97.1 A well demarcated lesion with proliferating interlobular stroma surrounding and distorting the epithelium.
Describe the naked eye appearance of the specimen
An encapsulated tumour with a characteristic whorled appearance of its cut surface.