

question. Malignant disease, carcinoma or sarcoma, is unhappily common in the female breast, and you are aware that its occurrence is generally supposed to be, to some extent, influenced by hereditary causes. I know that this point is, to a certain degree, disputed by some; but at least, we generally understand that, all other things being equal, a person having ancestors who have suffered from cancer is more likely to be afflicted with that disease than one whose progenitors have been perfectly free from the cancer taint. So far we may go without much fear of contradiction. Now, these mammary tumors, whether they be of the nature of an adeno-fibroma or pure adenoma or any other growth of an originally innocent kind, constitute really (if what I have said about their defective development is true) weak points in the mammary apparatus. Seeing how prone the mammary gland is to become the seat of malignant disease, it follows logically that a patient who has in the mammary gland a tumor of this sort would be more likely to suffer from malignant disease than one whose breast is normal, because of the existence in the mammary apparatus of a weak point, more liable to retrogress, more liable to change and erratic growth than the healthy gland itself. Again we may go still further and say, if what has been already stated is correct that a person having a chronic mammary tumor, however innocent it may in itself be, whose ancestors have exhibited the cancer taint, would be more likely to suffer from malignant disease than one who had no such tumor. Further, it ought to follow almost as a matter of course that if malignant disease should attack the breast of a patient who has one of these tumors the disease should begin in the tumor and not in the healthy breast tissue; that the tumour would, in fact, form the centre for the malignant growth. These views, although in the main, I believe, correct, are not quite in accordance with the teaching of the text-books. There is another point of interest in connection with these tumours upon which the books are, I venture to think, somewhat misleading. Upon consulting some of the text-books in common use you will I think, find that the adeno-fibromata, the ardeno-sarcomata and the adeno-cystomata are described as entirely distinct and different growths, without any reference to the possibility of the sarcomatous forms being simply produced by changes occurring in the adenomata or adeno-fibromata. That the change from the benign to the malignant form of growth is not uncommon I have, however, no doubt. Amongst the cases of tumors of the breast upon which I have operated during the past two years there were five in which the growths were small and had all the characteristics before operation of adeno-fibromata. In each of these cases there had existed without change for a long period a chronic mammary tumor, which shortly before

the operation had commenced to grow. In three of the cases the tumors proved to be sarcomatous, one was scirrhus and one was "duct" cancer, while in each there was clear evidence that the original growth had been an adeno-fibroma, which formed the soil in which the malignant disease had started.

The last of the cases occurred only a week since and is so characteristic that it is perhaps worth relating. The patient was a lady forty-three years old, who seven years ago discovered quite by accident a small "lump" in the right breast. Having thus discovered it, she, as is the custom with many patients, carefully at first concealed the fact of its existence. No increase of size or discomfort occurred, but ultimately she consulted a physician, who told her that the swelling was not in itself serious, but that, on the whole, it would be better, at some convenient time to have it removed, and further, that if it showed the least inclination to increase removal should at once be undertaken. She did nothing more in the matter till three years later, when she was confined of a child. The swelling then became sensitive, and she consulted the accoucheur in attendance, who advised her to leave the tumour entirely alone, unless it grew larger. This advice she readily took. Three years afterwards the increase in size commenced, and, still reluctant to have anything done, she allowed the growth to continue until a fortnight before I operated, when she consulted the physician to whom she originally went and was told to submit to operation without delay. Upon removing the tumor, which lay in a well-marked capsule and was attached to the breast at one point only, I found it was clearly an adeno-fibroma, but in its centre was a rounded mass of softish material, to which the increase in size had been manifestly due. This semi-gelatinous material proved to be a "spindle-celled" sarcoma and was on all sides surrounded by a layer of tissue identical in structure with that of a benign adeno-fibroma. At one point the sarcoma was creeping towards the surface, and over this part the benign structure was so thin as to be hardly perceptible. The breast around showed no actual sign of disease, but as it was somewhat hard, and as a small hard gland could be felt in the axilla, I thought it better to take away the whole mamma. In this case I think there cannot be any doubt that the tumor had only recently become sarcomatous. The chronic mammary tumor, in fact, represented a weak point in the breast, and irritation of some kind, produced probably during the time of suckling, affected the nutrition of the tumor in such a way that it began to grow erratically, a sarcomatous change in it being the result. If the patient had not been the subject of a chronic mammary tumor it is in my opinion nearly certain that she would not have developed any malignant growth, for this disease as clearly as possible origin-