

## MALIGNANT MELANOMA

### SPONTANEOUS REGRESSION AFTER PREGNANCY

BY

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Several reports have appeared recently dealing with two aspects of malignant melanoma—their relation to pregnancy and their spontaneous disappearance. Both these occurrences are said to be rare, and it may therefore be of interest to record the following case, which showed both these unusual features.

#### Case Report

A married white woman of 38 was first seen by me in May, 1943. For several years she had had on the extensor surface of the right forearm an area about the size of her thumbnail which, though normal in colour, was a little elevated above the normal skin surface. About the middle of 1942, possibly following a scratch with a pin, part of the area became black in colour. This area was excised by her doctor in July, 1942, and the pathologist, Dr. J. O. Mercer, reported on the specimen: "A circumscribed tumour composed of small naevoid cells with regular nuclei associated with a large quantity of melanotic pigment and surrounded by a zone of hyaline fibrous tissue. It is not invasive. This is a simple melanoma. There is no evidence of malignancy."

Two months later a black area appeared in the scar, and in May, 1943, when a black lump the size of a marble had developed, wide re-excision down to the deep fascia was undertaken. The pathologist now reported: "A cellular tumour composed of actively mitotic oval cells and large collections of pigment, mainly extracellular. The tumour has invaded the hyaline fibrous tissue and local fat. The appearances are quite unlike those previously reported on. It is a malignant melanoma."

At this stage she was referred to me for radiotherapy, mainly because the surgeon was reluctant to undertake re-excision for a tumour of unknown extent. She presented to me as a fit-looking woman with no evidence of residual disease. She had three children, then aged 10, 8½, and 4 years. She received an estimated tumour dose of 4,700 r in 17 days to the forearm through two opposing 15 by 10 cm. fields. She was seen again on November 8, when there was no sign of recurrence and when she was ten weeks pregnant. By mid-March, 1944, 10½ months after her second excision, and when she was seven months pregnant, she presented with multiple subcutaneous bluish nodules, up to the size of marbles. Such nodules were found on the left waistline, the right flank and the right upper arm. They were regarded clinically as blood-borne metastases, and the prognosis was thought to be hopeless, but to confirm the diagnosis the lesion in the right upper arm was excised on March 10, 1944. The assistant pathologist now reported that the specimen consisted of a lymph node, the structure of which was almost entirely replaced by tumour, consisting of solid masses of darkly staining polyhedral cells. There was little pigment present. The tumour was considered to have become more cellular and less well differentiated.

By May 8, 14 days after the birth of a normal child, the patient had developed further deposits in the right scapular and inguinal areas. Localized tumour masses were also noted in the left breast, but it was not certain that these were of the same nature, because there was a history of breast abscess on this side.

On July 10 she was seen again, and, to our surprise, all the nodules noted at her previous attendance had disappeared, except for a small node in the right groin. She was feeling very well and putting on weight. Small cres-

centic areas of pigmentation were seen on the temporal sides of both disks, but did not appear to be neoplastic in nature.

She has been seen on various occasions since, and at the time of writing (June, 1955) she is entirely well. This is twelve years after excision of the primary lesion, and eleven years after the appearance of widely scattered secondary deposits.

There can be no doubt that this tumour was malignant. The clinical course was entirely consistent until, of course, the point at which regression took place. The sections were twice reviewed by Dr. Mercer. On the first review, late in 1944, he expressed his agreement with his assistant's opinion that the tumour in the lymph node was an undifferentiated deposit from a malignant melanoma. In a second review within recent months he says: "The original report that the tumour was a pigmented naevus should certainly be qualified by a statement that, in the light of modern views on the histology of melanoma, it was clearly a malignant tumour when it was first removed."

It is therefore believed that both the clinical and the pathological evidence is quite conclusive that a malignant melanoma recurred in widely disseminated form during pregnancy and disappeared spontaneously after delivery. We find it very hard to believe that these two unusual happenings were not in some manner directly related one to the other. The sequence of events strongly suggests that the metastases developed as a direct response to the stimulus of pregnancy, and that they were in fact so dependent upon this stimulus that upon its withdrawal they themselves disappeared. The speed of their disappearance is in itself remarkable, regression being clinically complete within eleven weeks of delivery. One other feature is that there was no local recurrence after the re-excision. This raises the possibility that the "metastases" may have been multicentric foci of disease arising *de novo* in tissue particularly sensitive to the physiological stimulus, or, alternatively, that the stimulus led to the activation in these areas of malignant cells which up to that time had been lying dormant.

I have to thank Dr. J. O. Mercer for permission to make use of his reports and letters.

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## Medical Memoranda

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### Uterine Fibroids in a Young Woman

The following case is worth reporting on account of the large size of the tumours in a young woman, and because the only symptom complained of was swelling of the feet. There had been no menstrual abnormality at any time if one excepts a slight suggestion of water retention for the latter half of the menstrual cycle. There was no interference with normal daily bowel action.

#### CASE REPORT

An unmarried virgin aged 29 was referred to hospital complaining of having had swelling of the feet for the past year. Her doctor had referred her to a general surgeon for this condition and for a palpable mass in her abdomen. For the past 12 months she had noticed her feet swelling about the middle of the menstrual period and then becoming normal after the period had begun; the swelling had become more pronounced during the year.

On questioning she said that just before the period she had had a headache, which disappeared when the menstrual discharge started, and that there might have been some swelling of the upper abdomen. Her menstrual periods had always been regular every 28 days and lasted for four days, with pain for some hours before the flow but not bad enough to interfere with her work as a clerk. The loss had always been heavy, and small clots had often been noticed, but there was no pain when they were passed. The menarche had