Chorion-Epithelioma of the Uterus Preceded by Vesicular Mole and Accompanied by Unusual Nervous Symptoms.*

By Miss Ivens, M.S.

MARIE S., æt. 47, married, 10 para, was born in Mannheim, but had lived in England the greater part of her life; she came on June 16, 1909, to the Stanley Hospital complaining of a brown discharge.

Past History. Menstruation began at 15, was usually regular, lasting 3 days. The youngest child was 10 years old. No miscarriages.

History of Illness. In September, 1908, amenorrhæa began, and lasted until December 22, when a flooding occurred, lasting nearly 10 days. Hæmorrhage continued intermittently for a period of six months until June 16, 1909, when the patient was seen at outpatients. She was then anæmic, and of an extremely sallow-yellowish complexion. The uterus was enlarged to the size of a four months' pregnancy and there was a brown mucous discharge. A diagnosis of retained mole was made and the patient admitted. On July 7, the uterus was explored, and masses of cysts and old blood clots removed from the uterus, which was then curetted. Involution took place, discharge ceased and the patient went to a remote part of Wales for change of air. While in hospital, temperature and pulse were normal.

Microscopical examination of the tissue removed showed the ordinary structure of a hydatiform mole, and there was nothing to indicate any chorion-epitheliomatous change. On September 16, the patient reported herself at hospital, saying that she felt better, and that the ordinary periods had returned. She was still anæmic, and the uterus felt soft, and rather larger than when she left the hospital. On September 28, I saw her again. Hæmorrhage with the passage of clots had occurred, and the uterus was distinctly larger (T. 98.4, P. 74). The patient was admitted the same day with a diagnosis of chorion-epithelioma of the uterus.

On the following afternoon she complained of cold, shivered, and had pains all over. The cheeks were flushed and the temperature began to rise, reaching 102° the next day, and 104° the day after. There was free uterine hæmorrhage.

^{*} Read before the N. of Eng. Obst. and Gyn. Society, Dec. 16, 1910.

No abnormal signs were present in the chest, and on the supposition the attacks were due to the uterine condition, I operated on October 3.

Operation. Abdominal Panhysterectomy. The abdominal wall was thin but vascular. The omentum was injected. There were no adhesions. The uterus was the size of a three months' pregnancy, and dark red in colour. The shape was peculiar, as a localised bulging could be seen in the anterior wall, close to the left uterine cornu. In the left ovary was a small blood cyst. The peri-uterine cellular tissue was vascular and oozed freely, but there was no considerable loss of blood. The condition of the patient at the end of the operation was fairly good, but she was very cold.

No reaction took place, the temperature gradually fell, and the same night touched 95° for some hours, while the pulse was 90 per minute. Rectal salines and brandy were given, and the following night the temperature rose to normal. The skin was dry, and the face flushed. For two nights the patient did not sleep, and an injection of morphia, gr. $\frac{1}{6}$, was given on October 5. The following morning, October 6, she was stuporose, the pulse was weak and rapid, almost uncountable, while the temperature was normal. There was no abdominal distension or vomiting, and the bowels acted with an enema. Salines were continued into the cellular tissue, and the patient throughout took nourishment well.

On October 7 she became restless, the muscles of the face and limbs twitched, and there was loss of sphincteric control. A bruise appeared over the left buttock and sacrum and rapidly ulcerated. There was slight jaundice. The urine contained a trace of albumen and bile. The pulse rate was 144, temperature 101°. On October 8 there was ptosis of the left eyelid, twitchings of the limbs continued and there was some rigidity. The mental state was still impaired, there was no response to questions and the patient whined feebly when moved or touched. Ankle-clonus was marked, and the patellar, supinator and triceps reflexes were increased.

On October 10 there were signs of reviving mentality, but the patient uttered sounds like a child learning to talk. She was very restless, and had to be incessantly watched as she tried to roll out of bed. On October 12 the wound burst open and had to be stitched up again. After this she became quieter, but was still rather dazed.

On October 13 Dr. Owen was good enough to examine the patient, and made the following notes:—

"The patient is stuporose and restless, does not understand what is said and has not spoken for three days. There is incontinence of urine and fæces. There is a slight interior tinge of the conjunctivæ and a little ædema of the feet. She moves the arms and legs of either side equally and as far as her mental condition permits of investigation there is no evidence of cranial nerve palsy. Both sides

of the face move equally, and there is a good range of eye movement. The pupils react sluggishly to light, and there is no optic neuritis. The knee-jerks are present, there is no ankle-clonus. On the left side there is an extensor response."

The wound made no attempt to unite, and on October 17 it was sewn up in three layers. After this the patient did well and began to sleep soundly. Jaundice disappeared and the ulcer healed. On October 31, exactly a month after the operation, she became conscious of her surroundings, but remembered nothing of her illness. November 5 she returned home, and was attended by Dr. Bradshaw, of Walton, who kindly kept me informed of her condition. November 19 I saw her again. She was weak, and could only just stand, but was fairly sensible and talked a great deal. There were no signs or symptoms of metastasis anywhere, but she had wasted. Knee-jerks were exaggerated and ankle-clonus present. December 23 she was bedridden and emaciated. Contractures were present and she lay in a heap, with the thighs flexed on the abdomen. The arms were also flexed, and the hands were wasted and claw-like. There were still no signs of metastasis and no cough. nourishment was taken well. In January, 1910, the patient died, and, unfortunately, no autopsy could be obtained.

PATHOLOGICAL REPORT. The uterus is moderately enlarged, and shows a dark red mass of clot, adherent to the inner wall. A mottled, reddish-white mass of growth penetrates the muscular layer, most deeply towards the fundus, and causes a bulging of the anterior uterine wall, near the left cornu. The peritoneal surface is smooth, and the cervix is unaffected. The left overy contains a blood cyst.

Microscopic sections show the usual characters of a chorion-epithelioma. Infiltrating the muscle wall and at one point approaching the peritoneal surface are masses of multi-nucleated protoplasm, and rounded cells with vesicular nuclei with areas of blood extravasation. The syncytium can be seen opening up the blood-vessels, which are large and congested throughout. Dilated glands are cut across in the endometrium. The cyst in the ovary shows lutein tissue.

Cases of chorion-epithelioma are no longer pathological curiosities, but this case presents some unusual features. It is possible that the retention of a hydatidiform mole in the uterus, from September, when amenorrhoea began, until July, when the uterus was emptied, at least 10 months, may have had some influence in determining the onset of the subsequent malignant change. Although there is such a close association between chorion-epithelioma and hydatidiform mole, the presence of the latter condition cannot be regarded as a sufficient indication for removal of the uterus, though in the present case the age of the patient would have justified such treatment.

Rigors and feverish attacks are not uncommon in cases of chorion-epithelioma, but they are not usually followed by such mental and nervous changes. At the onset the patient presented the appearance of one suffering from toxemia, probably derived from the abnormal placental constituents of the tumour itself, as the attack began before operation. The slow gradual onset of the nervous symptoms was evidence against an embolus of growth or a hemorrhagic lesion, and the partial recovery was inconsistent with an ordinary metastatic cerebral tumour, especially as, throughout, headache and vomiting were absent, and there was no optic neuritis.

It is possible that an inflammatory cerebral reaction followed the toxemia, that the low temperature reached had some influence on the subsequent condition. When the inflammation subsided it is clear that a sclerosis must have slowly developed which ultimately caused fatal symptoms. Paralyses of this kind have been recorded by Dr. Warrington¹ as occurring in the terminal stages of carcinoma apart from obvious secondary growths, and he considers there is some evidence that such a toxemia can cause profound changes in the nerve-cells.

Here, in the absence of a post-mortem, there can be no certainty. For the careful notes of this case I am indebted to Dr. A. E. Evans, late senior House-Surgeon.

REFERENCE.

Warrington. Review of Neur. and Psych., August, 1905, p. 517.
Note on a case of advanced carcinoma uteri with some symptoms of bulbar palsy and almost negative microscopical findings.