

## A CASE OF PRIMARY TUBERCULOSIS OF THE CERVIX SIMULATING CANCER, AND TREATED BY VAGINAL HYSTERECTOMY.\*

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MRS. S. T., aged thirty-six, a housekeeper, was sent to see me by Dr. Haslip on January 21, 1896. She had been married eight years, but had never been pregnant. She had suffered from a white vaginal discharge for years, even before her marriage. During the last nine months, however, bleeding had been noticed between the periods. The discharge had been slightly offensive. The first time the irregular bleeding occurred was after coitus, nine months ago. In the blood-stained intermenstrual discharge, she had noticed pieces of 'skin' from time to time, especially after the menstrual periods. For the last three months she had used a syringe for the vagina. Passing the pipe had on two occasions brought on bleeding. She had had pain in the left iliac region for five months, and also a dull feeling round the lower part of her body. The pain, however, did not seem to have been at all severe, and it had been constant for only one week. The catamenia had been regular every calendar month, lasting three to four days, and attended with very little pain. The amount lost had, if anything, been recently less than usual.

Three years ago she had bronchitis and influenza badly, and bronchitis again last year (1895). Before she was married she had suffered from gastric ulcer and hæmatemesis. But as a rule she had enjoyed good health until about the last twelve months, when she began to get weak and disinclined for exertion, and to suffer from the local symptoms already mentioned. She had not definitely lost flesh. As regards the family history, one of her aunts died of consumption—the only case she knew of in the family.

*Examination, January 21, 1896.*—Nothing abnormal was detected in the abdomen. On vaginal examination the external os was distinctly more patulous than usual, and a soft friable growth was felt in the cervical canal as far as the finger could reach. The growth bled very freely on touching it. Through the speculum the growth was seen to be slightly raised, and most of it was on the anterior lip and to the left, though there was some all round the

\* Read before the Obstetrical Society of London, April 2, 1902.

os. Bimanually the uterus seemed to be of normal size, and freely movable.

From the signs and symptoms above mentioned I had no doubt at the time that the case was one of malignant disease of the cervix, and I advised the patient to have the uterus removed. Accordingly, she was admitted into the London Hospital under my care on January 24, 1896.

On January 27 the patient was anæsthetized, and a careful examination made. The result confirmed what had been found at the previous examination. The whole appearance was, as far as



FIG. 1.—UTERUS LAID OPEN, SHOWING CONDITION OF CERVIX.

I could judge, identical with that met with in many cases of cancer of the cervix. The supposed growth broke down very readily when pressed on with the sound. The case seemed to be one of cancer of the cervix, suitable for vaginal hysterectomy.

*Operation, January 30, 1896.*—The uterus was removed by vaginal hysterectomy. The cut margins of the vaginal walls were freely seared with Paquelin's cautery. Pressure forceps were used to secure the vessels in the broad ligaments, and were left on. An iodoform gauze drain was passed between the forceps so as to project about an inch into Douglas's pouch. The forceps were all removed at the end of the third day, and the subsequent progress of the case was uneventful.

On February 20 an examination was made. There was a healthy-looking granulating wound, about half an inch in

diameter, at the top of the vagina. The patient went home on February 22.

I have seen and examined her three times since the operation. The scar at the top of the vagina was on each occasion quite healthy, and the patient was in good health. I wrote to her recently to inquire how she was, and she replied in a letter, dated November 20, 1901, that 'she enjoys fairly good health, and has had no return of the bleeding.' She occasionally has bronchitis and slight 'congestion.'

*Description of the Uterus* (after nearly six years in spirit).—Its extreme length is  $3\frac{1}{8}$  inches. Three pieces have been cut off for microscopic examination, and sent to the Clinical Research Association. Two from the cervix were reported on by Mr. Targett as showing tubercle. One piece from the fundus showed nothing abnormal. Before the uterus was laid open the external os was more patulous than normal. Round it were seen a series of papillary projections, which extended some way up the cervical canal. The largest was close to the internal os (Fig. 1).

Two drawings of the sections were made, under Mr. Targett's supervision, by the Clinical Research Association, and his description of them is as follows:

'Fig. 2 represents a portion of the mucous membrane of the cervix uteri thrown into ridges, and thickened by inflammatory growth. In one of these ridges is embedded a group of gray tubercles, with large well-formed giant-cell systems.'

'In Fig. 3 the top of this ridge of mucous membrane is represented with its columnar epithelium and cellular tissue. Three large polynuclear giant-cells are represented.'

*Remarks.*—Cullen in his valuable work on cancer of the uterus mentions cases of tuberculosis of the cervix. He says: 'This rare condition (tuberculous ulceration of the cervix) clinically might readily be mistaken for squamous-celled carcinoma of the cervix. He refers to a few cases. In one there were condylomata and tuberculosis of the cervix. The cervix was amputated, vaginal hysterectomy being found impossible. The patient died about a month after the operation, apparently of tuberculosis of the lungs. At the autopsy general tuberculosis of almost all the organs was found. As regards the physical signs in this case, on examination there were polypoid masses on the cervix and vaginal vault, not showing any tendency to bleed on examination. The patient was a coloured woman aged seventeen.\*

\* Cullen, 'Cancer of the Uterus,' 1900, p. 194.



FIG. 2.—LOW POWER. SECTION THROUGH RIDGE OF MUCOUS MEMBRANE.



FIG. 3.—HIGH POWER. MUCOUS MEMBRANE SHOWING GIANT-CELL SYSTEMS.

In another case mentioned by Cullen the patient died of general tuberculosis; there was tuberculosis of the uterus, tubes and ovaries. There was no evidence that it was primary in the uterus.\*

Cullen also refers to a case reported by E. Kaufmann, in which tuberculosis of the cervix was discovered at an autopsy on a patient aged seventy-nine. There was no general tuberculosis in this case.†

He does not, as far as I have seen, refer to any case in which the disease was primary in and limited to the cervix, and in which the condition led to an examination during life.

In my case the 'growth' on the cervix bled very readily on examination, and was also friable. In fact, it was not till after the uterus had been removed, and the tissue examined with the microscope, that I entertained the slightest doubt that the case was one of cancer of the cervix. I suppose there can be little doubt that, given a case of primary tuberculosis of the cervix, where there is reason to believe there is no tubercle elsewhere, vaginal hysterectomy is the right treatment. In my case, however, I have to admit, if that be so, the right treatment was adopted on a wrong diagnosis.

I may mention that it was not till four years after the operation that a portion of the cervix was sent to the Clinical Research Association for examination, so certain had I felt that the case was an ordinary one of cancer of the cervix. In the year 1900 I was writing a paper‡ on the after-histories in forty cases of vaginal hysterectomy performed for cancer of the uterus. This case was one of that series. I obtained reports from the Clinical Research Association on portions of the cervix or body of the uterus, in each of the cases in which the disease was known not to have recurred. When I sent a portion of the cervix in the case that forms the subject of this paper, I fully expected to get back a report that the tissue showed cancer. Instead of this, however, Mr. Targett reported that the tissue showed the presence of tubercle, and asked for another piece of the cervix to examine. This was sent, and the report came back that this portion, like the first, showed the presence of tubercle.

Recently (December, 1901) I sent the first section of the cervix prepared and drawn by the Clinical Research Association to Dr. Bulloch, Bacteriologist and Lecturer on Bacteriology and General Pathology to the London Hospital. He reported on it as follows: 'I beg to report that I have examined one stained section of a growth said to have been removed from the uterus by Dr. Lewers.

\* Cullen, *loc. cit.*, p. 193.

† *Ibid.*, p. 346.

‡ *Trans. Royal Med. and Chir. Soc.*, vol. lxxxiv. (1901).

The section was evidently a transverse one through the mucosa of the uterus, and contained an abnormal tissue. The epithelium of the mucous membrane was denuded so as to expose the cytogenic tissue, in which parts of the uterine glands could still be detected, and they did not appear to be abnormal. Lying, however, in the cytogenic tissue were several nodules, which presented the classical appearances of a tubercular giant-cell system. The giant-cells were polygonal and contained many nuclei, the main part of the nodule being composed of epithelioid cells in a state of vacuolar degeneration. In the absence of the positive proof of the existence of *Bacillus tuberculosis* in the nodules, an exact diagnosis is impossible. There can, however, be no doubt that the lesion is of a chronic granulomatous type, most probably tubercular.'

Dr. Bulloch asked me for a portion of the cervix that he might make sections for himself, and this, making the fourth piece cut off for microscopic examination, was sent to him. His report on this piece is as follows: 'I have nothing further to add to the report I have already sent you, with the exception of the fact that, although the structure was tubercular, no tubercle bacilli could be found in six specimens stained specially to show them.'

Pozzi,\* at the beginning of his chapter on 'Tuberculosis of the Generative Organs,' says: 'Invasion of the generative apparatus by the tubercle bacillus is somewhat rare. Certain regions, e.g., the vagina and the cervix, appear to be very refractory to it, no doubt on account of the resistance of the stratified epithelium that protects them. It is the tubes that are generally the starting-point of tubercular lesions. From the tubes the disease readily passes to the ovaries, and more rarely it descends down into the uterus itself.' He also says, 'Cases of tubercular disease limited to the cervix are not numerous,' and refers to two cases, one by A. Laboulbène, and another described by Cornil. The latter case was one in which the clinical signs suggested malignant disease, and on the assumption that the case was one of cancer Péan removed the uterus. Examination of the uterus afterwards proved that the morbid process was tubercular. Cornil was not, however, able to find any bacilli. The case recorded in this paper is therefore very similar to that of Cornil. In both cases the condition present was believed to be cancer, and in both, on this mistaken diagnosis, hysterectomy was performed. Although the structure was characteristically tubercular, tubercle bacilli could not be found in either.

\* 'Treatise on Gynaecology,' vol. iii., p. 128. The New Sydenham Society, 1893.



There is an exhaustive paper on 'Tuberculosis of the Female Generative Organs,' by Dr. J. Whitridge Williams, in the *Johns Hopkins Hospital Reports* (vol. iii., 1892, p. 85). The references to the literature are there very fully given, as will be evident from the fact that they are 133 in number. Though, however, there is this large mass of literature on tuberculosis of the female generative organs, there is very little of it concerned with primary tuberculosis of the cervix. It is interesting to observe that, when tuberculosis affects the body of the uterus, it very rarely involves the cervix, and also that when it involves the cervix, the body of the uterus is very rarely affected, whilst in most of the latter cases tuberculosis of the vagina has been present as well. In other cases tuberculosis of the cervix has been the sole manifestation of the disease in the genital tract in women the subjects of phthisis. Lastly, the cervix may be the only part of the whole body affected by tubercle. Apparently Cornil and Péan's case is the only one observed and recognised during the life of the patient; though even there, as in my case, the uterus was removed on a mistaken diagnosis of cancer. There is also a case of Zweifel's in which a similarly wrong diagnosis was rectified by examining a portion of the cervix with the microscope before operating. Whitridge Williams has no doubt that 'tubercular ulcerations of the cervix have not unfrequently been operated upon on the supposition that they were of carcinomatous origin.'

There is a case by Zweigbaum, of Warsaw, reported in the *British Medical Journal* (vol. i., 1889 p. 93), which is interesting as bearing on treatment. In that case the vaginal portion of the cervix was affected. He apparently cured the local mischief in three weeks by the application of the cautery. The patient, however, died five months later of general tuberculosis, and there was recurrence of tubercular ulceration in the vagina. As this patient died of general tuberculosis comparatively soon after the vaginal portion was found affected with tubercle, it does not seem quite clear that the cervix was the only part affected when the case first came under observation.

The fact that tuberculosis of the cervix may easily be mistaken for cancer may perhaps throw some light on those few—very few—cases of so-called cancer of the cervix which have recovered spontaneously without operation; for it appears not very improbable that a patient with tuberculosis limited to the cervix might occasionally recover spontaneously.