

TUBERCULOUS SALPINGITIS

A REPORT OF CASES TREATED AT THE FREE HOSPITAL FOR WOMEN,
BOSTON, BETWEEN 1896 AND 1927

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THE following report of 63 cases of tuberculous salpingitis covers the thirty year period from October, 1896, to January, 1927, and includes all patients who had tubal tuberculosis, whether the process was localized in one or both tubes or whether the tubal process was but part of a general pelvic or abdominal tuberculosis. In but 34 instances (53.96 per cent) was tuberculous salpingitis found alone. During this same period about 13,000 abdominal operations were performed. The finding of tuberculosis in but 0.48 per cent of laparotomies and in 2.26 per cent of all tubal inflammation in a gynecologic clinic establishes this manifestation of the disease as a comparatively rare occurrence. Others have found higher percentages of tuberculosis in tubal inflammations; e.g., Williams, 7 per cent; Findley, 10 per cent; Menge and von Rosthorn, 6.2 per cent, and Penrose, 18 per cent. In every case of our series the diagnosis was made or confirmed by microscopic examination.

Age Incidence.—The youngest patient in this series was sixteen; the oldest forty-six. There were 3 patients under twenty years of age, 14 between twenty and twenty-five, 22 between twenty-five and thirty, 11 between thirty and thirty-five, 9 between thirty-five and forty, and 4 between forty and forty-six.

Marital History.—Eight patients were unmarried; 55 were married. Five gave a history of spontaneous abortion, 5 had had one child, 4 had had two children, and 5 had had three or more children. A history of never having been pregnant was given by 35 married patients (55.5 per cent of the whole series and 64.8 per cent of the married patients). The percentage of sterility among women in general is usually calculated to be between 10 and 16 per cent.

Family and Past History.—A family history of tuberculosis was given by 7 patients, of malignancy by 3. A past history of pulmonary

tuberculosis was given by 2; coughing blood by 1; pleuritis by 7; of excision of glands of the neck by 2; operation for tuberculosis of the kidney by 1; typhoid fever by 7; influenza, 2; scarlet fever, 1; rheumatic fever, 3; erysipelas, 1; malaria, 2; breast abscess, 1; and "ulcers of stomach," 2. Four had had previous appendectomy, 4 had had tonsillectomy, and 6 had had dilatation and curettage.

Complaints.—"Pain in lower part of stomach," 42; "backache," 23; "desires children," 9; "burning on urination," 8; "swelling of stomach," 8; "painful periods," 8; "pus in urine," 7; "passes water at night," 6; "weakness," 6; "discharge from front passage," 5; "vomiting," 5; "painful urination," 4; "blood in urine," 4; "passes water often," 3; "irregular periods," 3; "falling of womb," 3; "loss of weight," 3; "fever," 3; "profuse periods," 3; "soreness in rectum," 2; "headache," 2; "pain through bowels," 1; "abscess outside of rectum," 1; "vomits blood," 1; "bearing down," 1; "pressure in pelvis," 1, and "painful intercourse," 1.

Each patient made one or more of the above complaints. In 3 of the 42 instances of abdominal pain the pain came in occasional, severe, sharp attacks while in the others it was constant, both dull and sharp and most often exaggerated before and during menstruation. In two cases menstruation relieved the pain. The duration of symptoms varied over an extreme range, from two weeks to eighteen years, most commonly from one to three years. Except for three complaints of loss of weight, three of fever, and one of vomiting blood, there were no symptoms that pointed toward lung involvement.

Menstruation.—Negative, 14; acquired dysmenorrhea, 28; acquired dysmenorrhea and metrorrhagia, 5; acquired dysmenorrhea and menorrhagia, 1; catamenia rare, scant, and painful, 1; pain just before, but relieved at start of catamenia, 1; pain after catamenia, 1; metrorrhagia, 6; menorrhagia and metrorrhagia, 2; catamenia began at age of nineteen, 1; oligomenorrhea, 2; abnormally early menopause (at nineteen and thirty-two), 2.

Other Tuberculous Findings.—Thirty-four patients showed no tuberculosis except that of the fallopian tubes. Of the others lung signs were present in 12 (19.04 per cent); the peritoneum was involved in 16, the ovary in 15, the endometrium in 14, the omentum in 3, and the mesenteric glands in 1. Ascites was present in 8 of those with peritoneal tuberculosis. Tuberculous pelvic abscess was found at operation, or developed after operation in 8 patients. One patient had tuberculosis of the urinary bladder at the time of operation; one had a fistula in ano. In 5 instances a tuberculous sinus was present or developed in the abdominal wound after operation, and closed from two months to one year later, resuture being necessary in three cases. Four years, six months after operation one patient was reported to have a fecal fistula in which no tuberculosis could be found.

Associated Pathology.—There were no peritoneal adhesions in 23 cases; i.e., tubes, ovaries and all pelvic and abdominal structures were free. The adhesions in the other 40 cases varied greatly from those that were described as tenuous, or fibrinous to the dense, diffuse, fibrous type. In 2 patients, both unmarried, the cervix protruded from the vulva in the form of a procidentia due apparently to poorly developed pelvic tissues. Fibroids were found at operation in 7 cases, an endometrial polyp in 1, hyperplasia of the endometrium in 6, adenomyoma of the uterine cornua in 1, and papillary serous cystadenoma of the ovary in 2.

Operative Procedures.—Five patients received no operative treatment beyond exploration and biopsy, the disease being widespread. Thirty hysterectomies (with bilateral salpingo-oophorectomy) were performed; two were complete, and the others supravaginal. In six cases both tubes and both ovaries were removed without hysterectomy. Various conservative operations were done in 22 instances. Of those patients treated conservatively, not one is known to have become pregnant at a later date. There were two operative deaths (3.17 per cent), from peritonitis and shock respectively.

RESULTS

Fourteen patients are untraceable.

Exploratory coeliotomy and biopsy, 5 cases. One patient is untraceable, one died of pulmonary tuberculosis one year, three months after operation, one was operated on again six years, eleven months after discharge, and is now well, ten years after her first operation; another patient has some pain in her abdomen, some flowing and discharge, but feels "pretty well" eleven years after operation. The fifth patient is alive ten years after operation.

Primary hysterectomy with bilateral salpingo-oophorectomy, 30 cases. Untraceable, 6. There was one postoperative death from surgical shock. Three died at three, four and one-half, and eleven months after operation of pulmonary, miliary, and generalized tuberculosis, respectively. One patient died two years, ten months after operation of "tuberculous complications." Another died three years, seven months after operation of "carcinoma of left ovary" (probably tuberculous abscess). A fifth patient died seven years after operation of "rheumatic heart disease," and the sixth was well except for slight flowing two years after operation, and died of "lobar pneumonia" ten years, six months after operation. There were well less than one year after operation, 6, and between one and two years after operation, 2. One patient complained of discharge and pain two years after operation. Six patients were well at three years, four years, six months, seven years, twelve and one-half years, fourteen years, and sixteen years

after operation, respectively. One patient was well except for a fecal fistula, in which no tuberculosis could be found, four years, five months, after operation.

Bilateral salpingo-oophorectomy, 6 cases. One operative death from peritonitis (1897). One patient, who had had "inflammation of the stomach and bowels" for eight years, "peritonitis" for four years, and "abscess of the colon" for one year, underwent supravaginal hysterectomy six months after removal of tubes and ovaries, had a pelvic abscess evacuated two years, three months later, and died two years, ten months later. The third patient had a mass in her pelvis one year, two months after operation, but was well four years after operation. Another patient continued to menstruate after operation (some ovary must have been left in) and complained of some lower abdominal pain which was better during menstruation, twenty-three years after operation. Her chief complaint was of persistent hot flushes. The fifth patient, with tuberculous peritonitis and ascites at the time of operation, was well nine months after operation. The sixth patient was well thirty-one years after operation.

Conservative operations, 22. Untraceable, 8. Two patients whose tubes were not considered badly damaged enough for resection or excision (biopsy was performed) were well five years after operation.

The following are brief outlines of the 12 other traceable cases.

1. One tube and ovary and part of other tube excised. Patient complained of irregular menstruation, pain in lower abdomen and much vaginal discharge seventeen years, five months postoperative.

2. Both tubes and one ovary excised. Supravaginal hysterectomy was performed three years, five months later. Patient was well seven years, ten months after operation, but died of pelvic abscess eleven years after operation.

3. One tube and ovary and part of other tube excised. Patient was well two years, eight months after operation.

4. One tube excised—bad, diffuse adhesions. Patient was operated on for acute intestinal obstruction one year, two months after operation and was doing fairly well four months afterward.

5. One tube excised. A small mass was present in the left lower quadrant three years, ten months after operation.

6. Resection of both tubes and one ovary. The patient was well three years, eight months later.

7. One tube resected and some adhesions broken up. Patient died twenty years later of "bronchial asthma."

8. Both tubes excised. Patient died sixteen years, seven months after operation of "bronchopneumonia."

9. Left salpingo-oophorectomy. Patient was well four years after operation.

10. Both tubes resected. Patient was well two years after operation.

11. Both tubes excised and a piece of ovary implanted in one uterine cornu. Patient was well nine years, seven months after operation.

12. Complaint was dysmenorrhea. Lysis of adhesions and bilateral salpingectomy. Patient not relieved. Operated on again sixteen years after first operation and now is well twenty-two years, five months afterward except for slight menorrhagia.

SUMMARY AND CONCLUSIONS

1. The finding of tuberculous salpingitis, either alone or in association with pelvic, abdominal, or thoracic tuberculosis, in less than one-half of one per cent of patients undergoing laparotomy in a gynecologic clinic, and in 2.26 per cent of all tubal inflammation, demonstrates the comparative infrequency of the disease.

2. The disease makes itself known almost exclusively in the third and fourth decades, its highest incidence being in women between the ages of twenty-five and thirty.

3. The percentage of sterility in this series is 64.8, as against a 10 to 16 percentage among women in general.

4. A family or past history of tuberculosis, or suggesting it, was given by 20 per cent of patients.

5. The patients' complaints afforded no definite clue toward making a preoperative diagnosis.

6. The duration of symptoms varied from two weeks to eighteen years.

7. There were no menstrual complaints in 22.2 per cent of patients. In 53.9 per cent acquired dysmenorrhea was present.

8. Physical signs of possible pulmonary involvement were found in 19.04 per cent of this series, although there were only 7 complaints that could be interpreted as indicating lung disease, and these were not chief complaints. Five, however, of those who had lung signs at the time of operation were well from ten to twenty-three years after operation. (One of these died of "bronchial asthma" twenty years after operation.)

9. Eleven patients, 17.4 per cent of the series, are known to have died of probable tuberculosis. Five of these 11, 7.9 per cent of the total, died of probable pulmonary tuberculosis. Only two showed pulmonary signs at the time of operation.

10. In only 53.9 per cent of cases was the disease apparently localized in one or both fallopian tubes.

11. The primary operative mortality was 3.17 per cent. Operation was probably a contributory cause of death in at least 2 other instances.

12. No later pregnancy is known to have occurred in any of these patients.

13. It is difficult to draw definite conclusions concerning treatment and its results, for some patients who, because of the extent of the disease, were only explored, or submitted of necessity, to conservative operation, were well for long periods. On the other hand, conservative operation on early or moderately severe cases did not give satisfactory results. The best long-time results were achieved by radical operation, in cases where the disease was fairly advanced but not beyond operative measures. This may have been purely coincidental.

Although operation is necessary for making a diagnosis and is undoubtedly an important part of treatment in that it removes diseased tissue, its place in relation to general health measures, such as rest, diet, and light, cannot be stated definitely, because data as to the actual living conditions of these patients have not been available.

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