

TWO CASES OF GENERAL SUPPURATIVE PERITONITIS  
FOLLOWING THE RUPTURE OF A PYO-  
SALPINX DURING LABOR. —  
DEATH. AUTOPSIES.

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When a series of over eighteen hundred consecutive cases of labor without a maternal death terminates in two such deaths within a short space of time, under identically the same obstetrical treatment that had been pursued in the previous cases, it would seem as though the fatalities might possibly present points of interest to this society, especially as an autopsy was performed upon each woman.

On December 19, 1888, a woman in ward 14, who had been in the obstetrical department for over two months, died of eclamptic convulsions shortly after delivery. From that date until December 30, 1893, 1,839 women, over eighty per cent of whom were primiparae, were consecutively delivered in ward 14 without a single death. This series merely includes all those women who entered the hospital otherwise than in articulo mortis, *i. e.*, those women over the latter part of whose period of gestation we were able to exercise some control. It excludes about half a dozen cases of neglected transverse presentations, brought to the hospital only to die, after all the resources of the outside obstetrician toward delivery had failed. It is needless to say that these last cannot be called hospital cases in any sense of the word, except in so far as that they died within hospital walls.

1. D. H. entered the hospital to the service of Dr. Watkins December 6, 1893. Her history was, briefly, as follows: Married, twenty-two, American, unipara. Family history good. Patient reports herself as very susceptible to disease, has had all the usual children's diseases, typhoid fever, pneumonia, and suffered severely two winters ago with la grippe. Her first child was born in June, 1892, at about the eighth month of gestation. Labor was very difficult and tedious, terminated by the use of forceps. An attack of puerperal fever followed, which kept her in bed for nearly two months. Upon finally arising, she slowly regained her strength, and has felt well ever since, save for slight gastric disturbances in early months of present pregnancy. She last menstruated early in April.

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Examination showed patient to be of a somewhat phthisical build, with a history of incipient consumption. The left apex was found to present the physical signs of beginning consolidation. No other thoracic or abdominal lesions discovered. The urine was rather scanty, but negative. The fetus presented in the O. L. A. position, caput mobile. The fetal heart rate was 160, clear and distinct. The pelvis was contracted, a Justo-minor pelvis of slight degree. The cervix was deeply lacerated bilaterally, otherwise the uterus and adnexa were considered to be normal.

Labor occurred on Christmas morning and was quite rapid. As I was out of town my colleague, Dr. Tinen, attended the patient. There was nothing worthy of note about the labor save its extreme rapidity.

I saw her that evening. Her temperature was 100.8° and her general condition not good. She complained of pelvic pains which was relieved by a slight kneading of the uterus, and considered to be due to afterpains. Her pulse was weak and rapid, the face anxious, her entire aspect that of one in the early stages of some acutely painful disease. The next morning, however, her temperature was 98.2° and she felt much better. I was as much relieved as the patient, but only for a little time, as that afternoon she had a decided chill and her temperature reached 103.4°. Subjectively, the only complaint was of pain in the left side of the chest, there was now no abdominal distress, and the lochia were normal. Remembering the apical consolidation I at once thought of a pneumonia of that side. On examination only a few moist râles could be heard. As the patient's general condition was rapidly growing worse, I transferred her to the gynecological ward, early on the following morning. Here a history of obscure febrile attacks throughout her period of gestation was obtained. Examination revealed some slight abdominal tenderness and tympany, but nothing more than is frequent in the early part of the puerperium. A distinct friction rub could be felt and heard over the lower part of the thorax on the left side, with many moist râles. No indication for uterine curettement could be found, the lochia continuing normal. The patient remained in the same general condition for the next two days, growing steadily weaker. No signs nor symptoms referable to abdomen nor genitalia. Excessive pain complained of in left side. Temperature ranged between 100.2° and 102°. Early on the morning of December 30, the pulse rate reached 140 and the temperature 103.6°, and shortly afterward the patient died rather suddenly.

An autopsy was performed by Drs. McGrew and Clausen which revealed a general diffuse suppurative peritonitis. The uterus was found well contracted, the cavity empty, clean and sweet. No signs of placental infection nor decomposition. The adnexa on the right side were normal. The left tube was very much injected, and upon pressure several drops of a purulent fluid were caused to exude from the fimbriated extremity, which lay free in the abdominal cavity.

In the lungs nothing was found save the apical changes with a diffuse bronchitis. A few fresh adhesions in the pleural cavity.

The second case was that of S. F., admitted to the service of Dr. Watkins, December 24, 1893. Family and personal history negative. No venereal history obtainable. Patient is a strong healthy unmarried primipara. Hungarian, of very sturdy appearance. Pelvic measurements normal. The presentation and position of the fetus could not be made out at the first examination, so bimanual exploration of the pelvic viscera was made repeatedly, under strict asepsis, until finally the presentation was diagnosed as longitudinal, the position as O. L. A. Labial edema was well marked but no other structural abnormality discovered. The fetal heart tones were heard on the left side, high up above the umbilicus. 146 to the minute, distinct. Urine normal.

Labor set in at about 7 P. M. of January 15. Examination per vaginam under aseptic precautions showed the bag of waters to be ruptured and the amniotic fluid to have all drained away. The cervix was about the size of a dime, hard and rigid. Not expecting labor to terminate for some time, I left the ward. Just before midnight, less than five hours afterward, I was hurriedly called, and upon reaching the confinement room found, much to my surprise, the child already born, without any aseptic precautions other than the ordinary cleansing of the mother's genitalia. Otherwise the labor was quite normal. The patient then passed into the hands of Dr. McGrew, with the change of services, and later, upon transference to the gynecological ward, into those of Dr. Clausen. To both of these gentlemen I am therefore indebted for their notes and memoranda upon this case.

For thirty-six hours after delivery all went well. Then on the afternoon of January 17 the patient had a chill, her temperature reaching 103.2°. She was promptly sent over to the gynecological ward. Here it was thought best to clean out the uterus, which was accordingly done. Nothing found save a few odorless shreds of placental tissue.

The next day her temperature was 105° and she grew rapidly worse. Became quite tympanitic and somewhat delirious. No effacement of liver dullness, however, and no vomiting. Constipation absolute.

Repeated uterine curettement was practiced, with no ameliorative result whatever. January 20 her temperature reached 106.4°, the next day 108.2°, with a pulse of 164. She was now in collapse, and remained so until she died that afternoon.

Four days later I performed an autopsy, assisted by my colleague, Dr. Tinen. General diffuse suppurative peritonitis was present. The uterine cavity was absolutely empty, and showed no signs of infection; the uterus was well contracted down, and the adnexa on the left side normal. On the right, however, everything was matted together by old adhesions. The tube was injected, elongated, constricted and tortuous. From the enlarged free end about 5ij of pus was readily expressed. The tube was patent about as far as its middle, where it opened into a cystic dilatation with greatly thickened walls, filled with pus, and communicating with a similar cavity in the broad ligament just below it. Beyond this cyst toward the uterus the cavity of the tube was obliterated. No other abnormalities whatever found in the body.

The writer was unable to discover any anatomical reason for the comparatively good health of the patients during the first twenty-four hours. In each case there was no obstacle to the free outflowing of the pus, and it would seem as though symptoms should have resulted at once, upon the end of labor.

#### CONCLUSIONS.

1. Particular attention should be paid by the obstetrician to a history of slight obscure febrile attacks during gestation, especially when there is any discoverable cause for a possible pelvic lesion. These attacks are generally referred to as "malarial" by the patient, but in a nonpaludal region, if quinine does not vanquish them, and an examination of the blood reveals nothing, the pelvic viscera may be looked to with decided profit.

2. In addition to the usual examination as to the condition of the urine, position of fetus, size of pelvic straits, etc., there should be in every case an attempt to discover the condition of the uterine adnexa, with an especial view to the possible existence of purulent collections, the limiting adhesions of which are particularly liable to yield to the terrific strain upon the whole pelvic contents in childbirth. In the class of cases usually seen by the members of this society this will be found somewhat difficult, but where one is able

to examine a woman before the ninth month of gestation the procedure should be fairly easy, and easy in direct proportion to the earliness of time at which the accoucheur is retained.

3. It should be regarded as an obstetrical axiom that no woman with a pyosalpinx should ever be allowed to enter labor carrying this pus in her body. Undoubtedly many a woman has gone through labor safely in spite of the existence of this condition, but it never can be considered as anything short of an accident, which ought not to again occur. The powder magazine was there, the match was applied, but for some reason the powder did not burn. If all the statistics could be known, undoubtedly even such a *dernier resort* as Cæsarian section, would be found to offer better results both as to mother and fetus, than the persistence of the pyosalpinx unmolested, especially an aseptic Cæsarian section performed as an operation of convenience and election.

4. If a woman with a pyosalpinx has once entered upon labor there is then no precaution, short of a laparotomy, which may be taken by the obstetrician, that can avail him anything in the prevention of general peritonitic infection. No detail of strict asepsis should be neglected, yet in spite of all endeavors tearing of the slight adhesions about the tube may occur, with most lamentable consequences.

5. It is especially noteworthy that in both of these cases labor was very rapid of completion and the pains strong and expulsive. Evidently this fact has direct bearing upon the causation of the rupture of adhesions.

6. Contrary to the general idea, the fact that over twenty-four hours have elapsed since the delivery of the placenta with no bad symptoms whatever, does not militate against the diagnosis of general suppurative peritonitis, due to a ruptured pyosalpinx, and the possibility of this affection should be always considered if a sudden rise of temperature occur for which no other local nor general causes may be found.

7. The early diagnosis of this affection is especially difficult, because :

a. The abdominal parieties are very much relaxed, thus requiring considerable gaseous distention to exist before tympanites is noticeable or the liver dullness interfered with.

b. The prevalence of afterpains is so universal that the first subjective symptom, the danger signal, may be entirely overlooked,

being attributed to a cause entirely separated from the true one.

c. In at least a certain proportion of cases collapse, vomiting and abdominal pains may be entirely wanting, and symptoms be referred to another part of the body.

8. Once developed, any intrauterine measures looking to the relief of this disease are worse than useless, only serving as a means of wasting priceless moments. There is but one treatment affording the least chance of help, immediate laparotomy under strict asepsis with drainage, aided by free saline catharsis.