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REFERENCES

1. GESCHICKTER, C. F. AND COPELAND, M. M.: Tumours of Bone, 3rd ed., 1936.
2. *Idem*: Tumours of Bone, 4th ed., 1946.
3. WILLIS, R. A.: Pathology of Tumours, 1948.
4. FERGUSON, A. B.: *J. Bone & Joint Surg.*, 22: 916, 1940.
5. PLATT, H.: *J. Bone & Joint Surg.*, 29: 6, 1947.
6. COLEY, P. L. AND HARROLD, C. C. JR.: *J. Bone & Joint Surg.*, 32: 307, 1950.
7. PREVO, S. B.: *J. Bone & Joint Surg.*, 32: 298, 1950.
8. CHRISTOPHER, F.: Text Book of Surgery, 4th ed., 1946.

BILATERAL SIMULTANEOUS TUBAL PREGNANCY*

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THE FIGURES on the occurrence of extrauterine pregnancy vary widely, as reported from different clinics. The most commonly reported incidence is about 1 in 300 obstetrical cases, as reported from the Cook County Hospital in 1948¹ by Abrams and Kanter. These authors reviewed 1,580 extrauterine pregnancies occurring from 1922-1948 at this hospital, and found only one case of bilateral extrauterine pregnancy.

Hall² in 1949 classified extrauterine pregnancy as follows: (1) Intra- and extra-uterine pregnancy at one time. (2) Intra-peritoneal: including ovarian and abdominal. (3) Multiple pregnancies in one tube. (4) Coincident pregnancies in each tube.

Shauta³ stated that multiple pregnancies, excluding intrauterine pregnancies *per se*, occurred as follows: (1) Simultaneous extra- and intra-uterine pregnancies were most frequent. (2) Twin pregnancies in the same tube, next in frequency. (3) Simultaneous bilateral tubal pregnancies were the rarest.

Of bilateral simultaneous tubal pregnancies, Eden and Lockyer, in their Textbook on Gynaecology, reported 28 cases up to 1927. Fishback⁴ in 1937, had collected 76 cases from the literature. Hall in 1949, found 87 cases reported, and Abrams and Kanter, in 1948, found 94 cases reported to that date.

Fishback laid down certain principles for the acceptance of an authentic case of bilateral simultaneous extrauterine pregnancy: "There

should be a description of the fetuses or any portion of them found, as well as of placental material. A microscopic examination may be necessary for fixing the pregnancy periods. Especially is this needed where only a hæmatosalpinx is present grossly."

As the fetal parts and placental tissue are usually small, and with some degree of degeneration, I feel that the demonstration of chorionic villi microscopically in each tube, should be sufficient to establish the authenticity of coincident bilateral tubal pregnancies. In the two cases reported below, such criteria were demanded and fulfilled.

DIAGNOSIS

As with single extrauterine pregnancy, the history of bilateral simultaneous extrauterine pregnancy follows no consistently set history. Usually there is a missed period, followed shortly by spotting or bleeding, accompanied by a greater or lesser degree of pain. With sudden rupture, there is, of course, the picture of intra-peritoneal bleeding with shock.

Pelvic examination should reveal tender adnexæ, either unilateral or bilateral, possibly with some degree of palpable mass on one or both sides, and with extreme tenderness and pain on moving the cervix. In no instance was a diagnosis of bilateral tubal pregnancy made preoperatively, in those cases reported.

At this point, two cases of simultaneous bilateral tubal pregnancy, under the care of the author during the past few years, are reported.

CASE 1

Mrs. A.Q., white, housewife. Age 29. This patient was seen on October 23. Instead of her expected period on October 20, she had only spotted slightly for one-half day.

Her menstrual history had been perfectly regular. She started menstruating at the age of 13, with a 28 day cycle, bleeding moderately for four days, with little pain. She had never been pregnant. Her previous history included a gonorrhœal infection, which was seen by the author during the acute stage two years previously. The infection was treated and cured, repeated negative smears having been obtained subsequently.

Pelvic examination on October 23 revealed nothing significant, except some tenderness in the right adnexal region. The possibility of ectopic pregnancy was considered, and the patient accordingly forewarned.

On October 29, the patient was suddenly seized with an acute lower abdominal pain, and collapsed. Seen one hour after the onset of these symptoms, the patient presented a typical picture of massive intraperitoneal hæmorrhage with profound shock. She was admitted to the Mount Sinai Hospital, and after some preliminary anti-shock treatment, was operated on four hours after the onset of her acute symptoms, with a diagnosis of ruptured tubal pregnancy.

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A ruptured tubal pregnancy was found on the right side, and the right tube and ovary were removed. Examination of the left tube revealed a second ruptured tubal pregnancy, and the left tube was also removed.

Much blood and clot were evacuated, and the abdomen closed without drainage. The postoperative course was uneventful.

Pathologist's report.—(1) Bilateral tubal pregnancy. (2) Endometriosis of the Fallopian tube. (3) Endometriosis of the ovary. In the section through the proximal portion of each tube, much blood clot is seen to be present in the lumen. Mixed with this are chorionic villi, and masses of trophoblastic cells (Figs. 1 and 2). In section of the Fallopian tubes, the mucosal villi are thickened by fibrous connective tissue. In the serosa of one tube are some foci of endometrial tissue.

three to five days, every twenty-one days. In the last six months they were a bit longer and a little irregular. Her last normal period was February 6, 1952. This was accompanied by a persistent lower abdominal pain for five to six days prior to admission.

Examination revealed a soft, tender left adnexal mass, apparently attached to a slightly enlarged uterus, in the anterior position. Movement of the cervix elicited severe lower abdominal pain. A diagnosis of ruptured tubal pregnancy was made, and the patient was admitted to the Mount Sinai Hospital for operation. On admission, pulse was 84. Blood pressure 110/80. The abdomen was tender with no rigidity.

Operation March 6.—There was much free blood clot on opening the abdomen. A large ruptured left ectopic, with a clear cystic mass, with much blood clot attached,



Fig. 1



Fig. 2

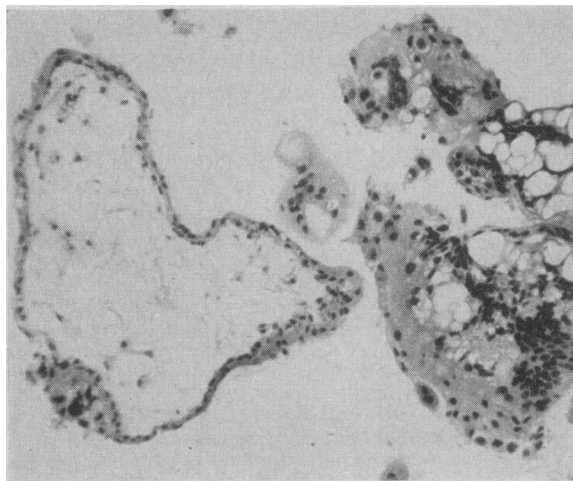


Fig. 3

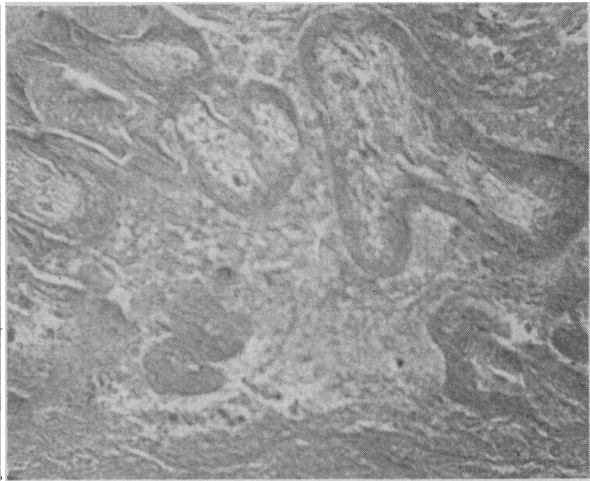


Fig. 4

CASE 2

Mrs. A.C., white, housewife, age 35, was admitted to the Mount Sinai Hospital March 5, 1952, with chief complaint of pain in the left lower quadrant.

The patient was feeling well until December 1951, when she experienced generalized lower abdominal pain, mostly in the right lower quadrant. It lasted two days and then disappeared. She had some intermenstrual pain of sharp stabbing nature, with some spotting for the next two months, in January and February, lasting minutes to hours.

Except for amenorrhœa with her two full term pregnancies, her periods started at the age of 14, and lasted

was mobilized, and removed. Inspection of the right side revealed a small mass the size of a plum, indicating a tubal pregnancy. The right tube was removed. The postoperative course was uneventful.

Pathologist's report.—(1) Ruptured tubal pregnancy. *Recent.* (2) Tubal pregnancy—*old.* Hæmatosalpinx with organization. Examination of the ruptured tubal pregnancy revealed a number of chorionic villi mixed with the blood, some staining well, and some rather poorly (Fig. 3). Examination of the old tubal pregnancy, showed much blood clot undergoing organization. Many poorly staining chorionic villi were found, all practically hyalinized. Many lymphocytes and histiocytes were found, the latter containing much brown pigment (Fig. 4).

It is interesting to speculate on the physiological mechanism that contributes to the occurrence of this rare condition. In Case 1 as well as in many cases reported in the literature, where rupture occurred early (10-14 days after the missed period) and where observation of the case was possible so soon, there can be no question that two ova were expelled from one or both ovaries at the same time, found their way into separate tubes, and were there fertilized either at the same time, or within a matter of hours of one another.

Where the history is rather prolonged, over a matter of weeks or possibly months, and where the chorionic villi showed a dissimilar developmental stage in both tubes, as in Case 2, and in many cases reported in the literature, the question of superfetation seems quite probable.

Case 2 would seem to exemplify what Bledsoe⁵ describes as successive pregnancies. This would indicate that one pregnancy occurring in one tube became arrested in its development and died. The hormonal cycle resulting in ovulation would then become re-established with the resumption of ovulation. A second pregnancy was then possible in the opposite tube, and did occur. Microscopic examination of the removed tubes should then show chorionic villi in both tubes, but in different stages of development, and with greater degeneration in the tube and fetal parts, representing the first pregnancy.

CONCLUSIONS

1. Bilateral simultaneous tubal pregnancy is a rare gynaecological entity, and is never diagnosed as of bilateral occurrence preoperatively.
2. Because it can occur, at all operations for ectopic pregnancy, both adnexæ must be inspected for extrauterine pregnancy.
3. Two cases seen by the author in the last two years are added to the literature.

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REFERENCES

1. ABRAMS, R. A. AND KANTER, A. E.: *Am. J. Obst. & Gynec.*, 56: 1198, 1948.
2. HALL, D. P.: *Am. J. Surg.*, 78: 906, 1949.
3. COX, M. E. AND STEINBERG, M.: *Am. J. Obst. & Gynec.*, 43: 120, 1942.
4. FISHBACK, H. R.: *Am. J. Obst. & Gynec.*, 37: 1035, 1939.
5. BLEDSOE, M. F.: *South. M. J.*, 11: 307, 1918.

A CASE OF DEPRESSION WITH ATTEMPTED SUICIDE TREATED AT A GENERAL HOSPITAL*

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THERE ARE TWO FORMS of depression with which the practitioner has to deal: endogenous and reactive. The former usually responds favourably to electro-convulsive therapy, whereas the latter requires psychotherapy.

The following case which was presented at medical rounds of the Montreal General Hospital illustrates (1) the psychodynamics underlying reactive depression and (2) a therapeutic procedure in successfully dealing with them.

J.F., a twenty-three year old woman, was brought to the outpatient department of the Hospital by police ambulance with cramps and prostration following the deliberate ingestion of iodine. Following appropriate measures of detoxication, she was admitted to the psychiatric in-patient ward of the hospital.

On admission she was tense, pale and tearful. She spoke slowly and hesitantly and her general attitude was one of dejection and despair. Physical examination revealed a well-developed, well-nourished woman of sthenic habitus showing no evidence of physical disease.

She was the third of five siblings in a working-class family and described herself as her father's favourite. She was very close to him in her early life which centered around gaining and maintaining his affection. She was very much upset by his death when she was fifteen years of age and felt "let down" and "deserted". She left school immediately afterwards and began work. At sixteen years of age she met and married a man some eight years her senior. In many respects this man represented a father-figure to her and provided the protection and security she felt deprived of at home, as her relations with her mother were somewhat strained from early childhood. She had one child which died at seven weeks of age and she was again pregnant when her husband volunteered for service in Korea with the Canadian Army. He was killed in action a few months later. She stated that she felt "nothing—just a numb feeling" when informed of his death. She did not cry at all at the time but carried on, as she put it, "as if nothing had happened". Although she felt increasingly incapable of enjoying life and although her general range of activity was greatly narrowed down, she felt impelled to carry on for the sake of the awaited child. A further bereavement occurred when the baby died of a congenital heart ailment at two months of age. Again she "felt nothing". She made the funeral arrangements in a mechanical fashion; then, hoping that a change of environment would "help her forget", she took a job in Montreal.

Nothing interested her, however; she met several men who were attracted to her but she could not reciprocate because "I felt it wasn't fair to my husband". She felt lonesome, sad and hopeless. She continually struggled against a feeling of unworthiness and reproached herself for letting her husband go to Korea and for what she considered her inadequate care of the baby. Again and again she averred how ideal her marriage had been, how kind her husband had been,

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