# SELECT CLINICAL REPORTS.

Under this heading are recorded, singly or in groups, cases to which a special interest attaches either from their unusual character or from being, in a special sense, typical examples of their class).

# A Case of Gangrene of the Vagina.

By MARK LINDSEY, M.R.C.S., L.R.C.P. Asst. Res. Med. Officer, Royal Waterloo Hospital.

L.D., age 35 years, was admitted to the Royal Waterloo Hospital under the care of Dr. Gow on July 21st 1911, complaining of "bleeding and abdominal pain."

I wish to thank Dr. Gow for his kind permission to publish this case.

Previous pregnancies 8, children 6, the last in March 1909.

In January 1910, after 6 weeks' amenorrhœa, a hydatidiform mole was passed. There has been no pregnancy since.

Menstruation began at 12, always irregular, varying from 4 to 6 weeks, duration 2 to 3 days, amount scanty. Some pain before the flow, relieved when flow was established.

### History of present illness.

The patient continued in her usual health until the 16th of July 1911, when profuse hæmorrhage occurred together with the passage of clots. The bleeding was so severe that she called in her private doctor. On making a vaginal examination he states that "very copious hæmorrhage resulted." The patient was therefore transferred to this hospital.

The following notes were taken shortly after her admission.

The patient looks emaciated and markedly anæmic. Temperature 102<sup>.2°</sup> F., pulse-rate 100 per minute, respiration 40.

Urine was of average quantity, sp. gr. 1020, acid, and contained no albumen or sugar or pus.

The breasts do not look active but some clear secretion can be expressed.

Rising out of the pelvis and extending mainly to the left of the middle line is a tender and rounded resistance, the upper limit of which reaches to  $3\frac{1}{4}$  inches above the symphysis publs.

Per Vaginam. The vagina contains an offensive purulentlooking discharge. Cervix is low down, deeply lacerated on the left side. Texture somewhat soft. Apparently attached to the posterior and left sides of the cervical canal is a soft mass, the size of a walnut.

On examination with the speculum the mass is seen to be almost black in colour and apparently gangrenous.

On *bi-manual examination* the mass felt per hypogastrium is identified as the body of the uterus, which is somewhat bulky. In the situation of both broad ligaments there is tender resistance.

After admission the patient's condition improved, and on July 25th the temperature had fallen to the normal, and the pulse rate to 90. On the following day, however, the temperature rose suddenly to 105° and was accompanied by a rigor. She was the same day placed under an anæsthetic and examined by Dr. Barris. The posterior lip of the cervix and the posterior vaginal wall in contact with this over an area having the diameter of about one inch appeared to be gangrenous. The uterus was somewhat bulky. Any further examination, however, was rendered impossible on account of sudden profuse hæmorrhage from the gangrenous area. The bleeding was controlled by plugging the vagina with strips of sterile gauze.

# Nature of the infecting organism.

Films were prepared and showed masses of micrococci arranged in clusters. On cultivation the growth was found to consist of staphylococci and streptococci (pyogenes). No other organisms could be detached in either films or on culture.

The presence of organisms was not shown in microscopic section of the gangrenous area.

#### Treatment adopted.

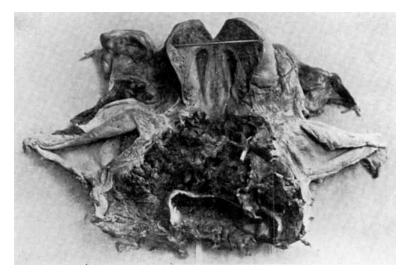
In addition to the ordinary methods the special methods of treatment adopted were large quantities of saline injections per rectum, irrigation of the vagina with cyllin and hydrogen peroxide douches, and the administration of a vaccine. The variety used was the polyvalent streptococcal, and the dosage on each occasion was one million organisms.

Further course of Case.

July 2	7. Two	rigors.	Temperature	$104^{\circ}$ .	Pulse rate 110.

- July 28. Temperature 103°. Rigor. Pulse 130. Plugging removed under an anæsthetic. No bleeding occurred. Gangrenous area had not increased. July 29. T. 101'8°. Rigor. Pulse 120.
- July 30. T. 106<sup>.</sup>4°. Rigor. Pulse 140. Profuse purulent discharge.

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Gangrene of Vagina.

- July 31. T. 100°. Pulse rate 120. Vagina examined. Gangrenous area involves the whole vaginal cervix and all fornices.
- August 1. T. 105.4°. Rigor. Pulse rate 130.
- August 2. T. 106.6°. Rigor. Pulse rate 154. Sudden profuse and spontaneous hæmorrhage during the act of defæcation. Bleeding controlled by plugging.
- August 3. T. 102°. Pulse 140. Gauze removed, followed by another profuse hæmorrhage, this was controlled by plugging.
- August 4. T. 104°. Rigor. Pulse rate 130. Plugging removed. no hæmorrhage.
- August 7. T. 103.8°. Pulse 130. Another spontaneous hæmorrhage controlled by plugging. Gangrenous area now extended over the upper half of the vagina. Signs of bronchitis.
- August 8. T. 103°. Pulse 138. Plugging removed followed by further hæmorrhage. The patient was by this time profoundly anæmic.
- August 9. T. 101<sup>.4°</sup>. Pulse 124. Another vaginal hæmorrhage. Vagina replugged. Bleeding controlled only after great difficulty. Gangrenous area had by this time extended to the vulval orifice. Patient died at 4 p.m.

# Post-Mortem Report.

There were signs of a generalised peritonitis. The peritoneum was infected and the abdominal cavity contained about a pint of a turbid greenish fluid. The pelvic peritoneum was almost black in colour. The pelvic contents were removed *en masse* (see the accompanying photograph).

#### Description of the parts removed.

The uterus, vagina and bladder have been laid open on their anterior aspect. The entire vagina is represented by a ragged ulcerating surface, almost black in colour, and extremely friable. The whole cervix is in a similar condition. The body of the uterus appears slightly enlarged. Its surface is smooth, the wall about 1 inch thick. The cavity is somewhat dilated, otherwise the body is healthy. The Fallopian tubes and ovaries of both sides show no abnormality. There is no recent corpus luteum in either ovary.

The cellular tissue of both broad ligaments is thickened and forms a mass the size of a walnut. This inducation is continuous with the gangrenous cervix, and on being incised is seen to be necrotic.

The bladder appears natural.

Microscopic section from the gangrenous vaginal wall shows the section is made up entirely of blood clots, and a few strands of very degenerate connective tissue.

Microscopic section from the uterine wall above the level of the gangrenous area shows at one edge a mass of blood clot. Beneath this are bundles of fibrous tissue and unstriped muscle, the cells of which are extremely degenerate, and take the stain badly. The bundles are widely separated from one another by areas of hæmorrhage. There is no marked degree of round-celled infiltration. There is also no microscopic evidence as to the original cause of the condition. No signs of any malignant growths are present, nor are there any cells present which would suggest a recent abortion.

The first abnormal symptom which the patient mentions in her history is an excessive bleeding. At the time of admission the uterus was distinctly enlarged.

When first seen the most striking sign was a gangrenous spot on the inner aspect of the cervical canal. This gangrenous patch spread downwards on to the vagina, and deeply into the cellular tissue, opening up the uterine artery and thus causing death from hæmorrhage and septic infection.

Although the history does not say so, it seems most probable that the starting point of the trouble was a septic wound in the cervix probably caused by an attempt to procure a miscarriage. It is difficult to account for the condition under any other supposition. The size of the uterus on admission was consistent with the notion that she had recently miscarried.

A gangrenous condition of the cervix and vagina is occasionally seen as a result of septic infection after full-time delivery, the trouble then no doubt starting in a cervical wound. Apart from this condition and sepsis following injuries inflicted on the cervix under the circumstances suggested above, progressive gangrene of cervix and vagina is practically unknown.