SACCULATION OF UTERUS

by

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Displacement of the uterus causes alteration in the axis of the parturient canal. It causes dystocia in labour whether it is a backward, forward or lateral displacement or torsion of the uterus. If these conditions are recognised early and corrected in time either by manual replacement or proper abdominal binders future trouble can be avoided. Hunter was the first man to discover and discuss these conditions in detail as early as in 1754. Lynch (Hunter's contemporary) recognised retroflexion which is more difficult to tackle. There is yet another variety—in some respects the most interesting—in which a portion of the uterus remains imprisoned in the pelvis, while the remainder enlarges and extends even higher in the abdomen as the pregnancy advances. It is termed as sacculation of the uterus. Oldham was the first to describe this condition. When retroverted gravid uterus does not correct itself in the natural course of events or as a result of manipulation by the obstetrician, it fills the cavity of the pelvis, and, being unable to free itself, impacts and incarceration takes place due to the formation of adhesions. As the foetus grows, that portion becomes sacculated. Generally, anterior wall becomes sacculated—posterior wall being fixed. Posterior wall only hypertrophies.

On the whole incarceration is a very rare phenomenon, 1: 2000 cases of displacement of uterus (Eastman). Out of that, sacculation of posterior wall is still rarer. Incarceration does not occur till 16-17 weeks pregnancy.

The present case belongs to the rarest type of sacculation and hence it is being reported.

Case Report

Mrs. J. M. aged 26 years, Hindu, was admitted to the Maternity Ward of Central Hospital, Asansol on 16-3-61 at 8 A.M.

History on Admission: She was admitted for bleeding per vaginam, fever and pain in lower abdomen for the preceding 10 days following 6 months' amenorrhoea. She was passing small bits of foetal parts for the last few days with a foul smelling discharge.

Past History: She had been admitted on 17-2-61 in the same ward for threatened abortion and was discharged well on 27-2-61 after usual treatment. No other significant illness, except puerperal sepsis after last delivery 7 years ago.

Obstetric History: 1st, 4 months' abortion. 2nd, F.T.N.D. 7 years ago. Child alive and well. She had severe puerperal

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sepsis for about 6 weeks and was very ill. No issue for 7 years. On admission she was III gravida, carrying 6 months pregnancy.

On Examination: Patient looked very ill and toxic. Her temperature was 100°F, Pulse 108/min. Volume and tension fair. B.P. 100/70. Tongue was coated. General condition was not satisfactory.

Per Abdomen: Uterus 24 weeks size. Tenderness + + over both flanks and hypogastrium. Foetal parts felt. Foetal heart sounds absent. Liver and spleen not palpable. Abdominal contour normal. Very offensive discharge per vaginam.

In the heart and lungs and other systems no abnormality was detected.

Management and Progress: She was provisionally diagnosed as septic abortion and in view of her toxic condition she was kept under observation. She was put in Fowler's position and was given intravenous infusions, e.g. glucose, periston "N", vit. C, sedatives and antibiotics (penicillin and streptomycin) were also given. Her blood and urine were examined. Urine was normal. Her haemoglobin was 60% (Hellige) i.e. 8.7 gms/100 c.c., white blood cells 6400/cmm., polymorphs being 82%. Her blood was grouped and cross-matched too. Her condition was slowly improving. She became afebrile on 20-3-61 and she was given full diet and was put on general line of treatment with liver and vitamins etc. Her pain in abdomen was also much less and she was restful, Her abdomen was x-rayed. It showed foetal parts and Spalding's positive. Patient was quite anaemic hence blood transfusion was arranged. On 24-3-61 she again shot up high temperature, started having pain in abdomen and blood-stained discharge per vaginam. She was given 250 cc of blood and put on Mysteclin V and injection pethidine 100 mgm. intramuscularly. On 28-3-61 she was better. She was given medical induction of labour by slow I.V. glucose-saline drip with syntocinon 2½ units. She expelled a few bits of products of conception herself, but there was no further progress of labour. She was much in distress due to pain in abdomen. Vaginal examination was not done uptil now as the patient's condition was not too good and she was septic. On 29-3-61 she was given general anaesthesia with a contemplation of doing digital dilatation of cervix to help her to terminate pregnancy.

Vaginal Examination: There was foul smelling blood-stained vaginal discharge, cervix was pulled up and was pointing directly backwards, it was rather fibrotic and os was closed. Uterus was 24 weeks' size, presenting part was felt high up (? vertex), fornices were clear, finger could not be inserted through the os. Cervix could not be brought forwards — the uterus was not very mobile. Tenderness could not be judged as patient was under anaesthesia.

P. S.: With great difficulty cervix could be visualised as it was high up and pointing backwards. It was blue and there was blood-stained discharge from the os, which was rather offensive.

Instrumental dilatation was not done as it was thought improper, considering her septic condition. Next morning her condition was the same. She was febrile and complained of pain as before. She was given another blood transfusion to buck her general condition up. Laparotomy was thought of as soon as her general condition improved a little. But on 31-3-61 at 3 P.M. she complained of severe pain in lower abdomen and epigastrium and complained of retention of urine and constipation. Her tongue was dry. Pulse was 108/min. She had no vomiting and no bleeding per vaginam. She was given Inj. morphia gr. ¼ and was catheterized and 10 — 12 ozs. of urine was withdrawn. She was sleeping after that. At 2-30 A.M. on 1-4-61 she had distention of abdomen. She was given glycerine enema and flatus tube was passed. She felt relieved and slept. Her temperature in the morning was normal.

On 1-4-61 Laparotomy was performed.

Operation: Anaesthesia — spinal heavy Nupercain 1.6 cc. and Inj. pethidine 100 mgm. and atropine sulph gr. 1/100 I.M. given by Dr. Sanyal.

The abdomen was opened by right paramedian sub-umbilical incision.

Operation Findings: The peritoneal cavity was filled with purulent fluid. There were flimsy adhesions between the anterior parietal peritoneum, greater omentum and fundus of the uterus. They were broken. The uterus and its append-

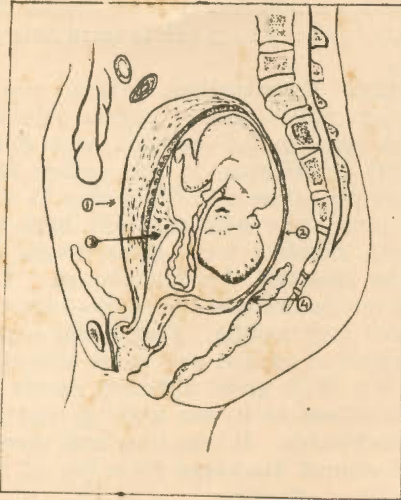

Fig. 1
Diagramatic representation of the uterus. Posterior sacculation of the uterus containing foetus in the sac.
1. Normal thickened anterior wall of uterus.
2. Extreme thinning of the posterior wall forming the sac.
3. Placenta in the anterior portion causing difficulty in approaching the uterus from anterior abdominal wall.
4. Mark the erosion of the rectum due to pressure of the sac causing chances of entrance of foetus in the rectum after rupture of the thin wall of the sac.

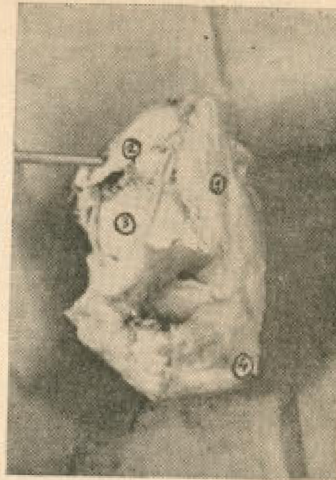

Fig. 2
Photograph of the specimen.
1. Anterior surface of uterus.
2. Posterior wall of the uterus, undergoing sacculation.
3. Skull of the foetus.
4. Vicinity of the cervix of the uterus.

ages were examined. Both ovaries were normal. Both tubes also were normal and healthy. But the origins of both the tubes were quite near each other. They were about 2½" to 3" apart. The anterior wall and fundus were pink and healthy, but appeared to be quite small in size considering the term of pregnancy. The posterior wall was enlarged and bulging markedly and was rather friable and discoloured. The anterior wall of the rectum also was discoloured. Probably nature was trying to rupture the uterus and find a way for the products of conception through the rectum. The surface of the uterus was examined thoroughly to exclude extra-uterine pregnancy. The other abdominal viscera were normal. When such disparity was noticed between the growth and shape of anterior and posterior walls, sacculation of the uterus was suspected. As the patient had only one living child and she was only 26 years old, hysterotomy was attempted. But on opening the anterior wall of the uterus there was severe haemorrhage, the placenta was unhealthy and was densely adherent to the anterior wall. So, to save the patient's life the uterine cavity was quickly packed to stop the bleeding and subtotal hysterectomy was done rapidly. The abdominal cavity was toileted and the abdomen was closed in layers in the usual way.

She was given intravenous glucose saline and blood transfusions during and after the operation. Three hours later she had severe post-operative shock. She was revived with blood transfusion, oxygen, intravenous hydrocortisone and inj. morphia in the usual way. On 2-4-61 she had another 250 cc. of blood transfusion. On the whole, she had a stormy post-operative period for about 48 hours and then she had an uneventful rapid recovery and was discharged from the hospital on 12-4-61.

Examination of Specimen

Specimen of uterus had rather flat and healthy anterior wall and a bulging and unhealthy looking posterior wall. It was about 7" in diameter. The origin of both

the tubes was quite near each other considering the term of pregnancy. They were about 3″ apart. Both the tubes were healthy. The anterior wall of the uterus had increased in size but much less than it should considering the term of pregnancy. It was pink and healthy looking. The posterior wall was rather discoloured and looked friable.

After dissecting the specimen the anterior wall of the uterus was found hypertrophic, the placenta was adherent to it; the posterior wall was markedly thinned out and formed a sac in which the macerated foetus was lying. The posterior surface of the uterus was looking unhealthy, thinned out and was rather friable.

Diagnosis of sacculation of the posterior wall of the uterus was confirmed only after examination of the specimen.

Discussion

The causes of sacculation of uterus are:—

(i) Old adhesions.
(ii) Tumours.
(iii) Deformities of the pelvis.
(iv) Undue projection of sacral promontory causing persistence of the displacement.

In the present case the last three were out of the question. She had puerperal sepsis, which might have caused adhesions.

Symptoms and signs in this condition are:—

(i) Frequency and difficulty in micturition.
(ii) Pain and tenderness in lower abdomen and backache.
(iii) Constipation which may become persistent later on.

All these were present in this case. There is no sign by which we can clinch the diagnosis. Signs of infecttion and toxic condition may develop in untreated cases. They were present in this case. Another rare occurrence in this condition is rupture of uterus. In this case impending rupture of uterus was revealed only during operation.

Treatment

Displacement of the uterus should be corrected in time during pregnancy.

In modern days the irreducible displacement is treated by replacement of the uterus per abdomen by breaking down the adhesions without sacrificing the child. Occasionally a hysterotomy is necessary and sometimes the obstetrician is compelled to perform hysterectomy as in the present case.

It might be asked "Why was the condition not diagnosed earlier,". Frankly speaking it is too rare a condition to strike one's mind easily. She was treated for threatened abortion a month before when incarceration of uterus was not revealed during vaginal examination. On admission, her general condition was not satisfactory. So, more concentration was made on her toxic and septic condition. X-ray and vaginal examination too did not help much. Hence, the diagnosis was missed.

What could have been the probabilities in this case? She must have developed some adhesions of the uterus with anterior parietal peritoneum due to puerperal sepsis she had after her last delivery. That also explains the long interval between the last and the present conception (she never used contraceptives). Large number of such cases generally end in abortion. She did not abort as there was superimposed infection

causing adhesions of the products of conception to the uterine wall and there was an alteration in the axis of the parturient canal. Medical induction alse probably did not work owing to disturbed polarity due to sacculation.

Summary

A very rare type of case of sacculation of uterus in a young woman of 26 years old is described. The diagnosis was made only after laparotomy. Hysterectomy was performed as a life-saving measure. The patient had uneventful recovery after a stormy post-operative period.

Acknowledgement

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