

ACQUIRED VAGINAL STENOSIS

(A Case Report)

by

U. VERMA,* M.D.

P. K. NATRAGEN,** M.B.,B.S.

K. D. THAKKAR,*** M.B.,B.S.

and

SARAD NANAWATI,**** M.D.

Vaginal stenosis is a rare entity, usually due to acquired causes. This is a case report of vaginal stenosis following a prolonged labour.

Case Report

Mrs. J. A. D., 22 years old patient, was admitted to this hospital with secondary amenorrhoea and dyspareunia of 5 years duration. The patient was alright 5 years back. She delivered a full-term still-birth after a prolonged labour at her native place. There was no history of insertion of any herbal remedies into the vagina. There was, however, puerperal fever and prolonged vaginal discharge. No other pertinent history was available.

Menstrual History: Pr. M. H. 3-4 Regular,
28-30

painless, moderate.

Examination: General condition was good: No evidence of Koch's infection. No stigma of rickets.

No evidence suggestive of lymphogranuloma. Vaginal examination was not possible as there was complete vaginal occlusion. A small dimple about 1/2" in depth was present in the region of the vagina. On rectal examination a small uterus which was

pulled to the left side was felt. There was thickening in both fornices.

Investigations: Blood, no anaemia, no leucocytosis; E.S.R. 28 mm at the end of one hour; V.D.R.L., negative. Urine, nil abnormal. Screening and X-ray chest—nothing abnormal.

The patient was admitted as there was doubt about the authenticity of her menstrual period. She, however, had a normal period of 4 days' duration.

Examination under anaesthesia was done during the menstrual period. Menstrual blood was seen coming from a pin point opening situated under a tag of vaginal mucosa on the right lower part of the occluded vagina. A probe was passed through this opening and careful dilatation done. 10-15 cc of collected menstrual blood came out from a blind pocket situated above the fistulous tract. There were plenty of adhesive bands between the walls of the vagina. The cervix could not be directly felt, there seemed to be 2-3 layers of tissue between the blind pocket and the cervix.

Operation Notes

Vaginoplasty with release of adhesions was done 10 days after the examination under anaesthesia. The fistulous opening which had been previously dilated was carefully enlarged and it was found that the anterior and posterior vaginal walls were adherent to each other at many places. By careful blunt and sharp dissection the vaginal walls were separated and the cervix was located. It was pushed to the left corner of the vaginal vault. There was

*Registrar.

**Interne.

***Houseman.

****Professor, Dept. of Obst. and Gynec.
B. Y. L. Nair Hospital, Bombay 8.

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hardly any cervical protrusion. The cervix was dilated upto No. 6. The uterine length was 23'. The bladder was seen to be very near the dissection area.

The raw areas so dissected out were carefully covered with the very scanty vaginal mucosa. Relaxing incisions were made and the new vaginal canal packed with vaseline gauze. The postoperative period was uneventful. Daily dressing with Furacin vaseline gauze was done. The patient was discharged on the 10th postoperative day.

Follow Up

The patient was next seen in O.P.D. 3 months later when she was found to be 8 weeks' pregnant. The vagina admitted one finger only, due to vaginal narrowing. She had slight spotting and was admitted and treated as a case of threatened abortion. However, she aborted spontaneously 3 days later.

Discussion

Going through the literature we have not been able to find any references of acquired vaginal stenosis following prolonged labour. Similar cases, however, have been seen in African, Arabian and Egyptian countries following chemical vaginitis and female circumcision.

Etiology

Vaginal stenosis may be complete with obliteration of the lumen, or incomplete where a narrow canal persists. The whole length of the vagina may be involved or the stenosis may be confined to segments, producing annular strictures.

A. Congenital Vaginal Atresia

We will not go into the details of congenital absence of the vagina. Suffice it to say that it is much more common than the acquired variety. The world literature is full of operations devised to create an artificial vagina.

B. Acquired Vaginal Stenosis

1. *Difficult labour*: In prolonged labour the presenting part may be arrested in the

vagina for long, so that pressure necrosis of the vaginal mucosa may occur, resulting in extensive sloughing. The separation of the slough leaves behind raw granulosomatous areas which are likely to adhere to each other unless prevented. These areas later contract and cause narrowing with complete occlusion of the vagina.

1. *Chemical vaginitis*: Insertion of various medicaments is a common practice in certain countries. Substances like herbs, rock salt etc., are introduced into the vagina for the purpose of 'hygiene' and post-partum 'involution of vagina'. These substances cause chemical burns of the vagina, which if extensive give rise to severe degree of contracture on healing. In certain tribes herbal pessaries are used to treat amenorrhoea, infertility, vaginal discharge, bad obstetric history or for purposes of criminal abortion.

3. *Surgical*: Repair of a vesico-vaginal fistula and rectovesico fistula often result in vaginal stenosis if a large defect has been closed, especially if the cause of the fistula is pressure necrosis following difficult labour. Occasionally, the cause is a gynaecological operation like Wertheim's hysterectomy, Mayo-Ward hysterectomy and anterior colporrhaphy, especially when too much of the vagina has been excised.

4. *Female circumcision and allied procedures*: The custom of female circumcision is widespread in Africa. Its origin is uncertain though authorities attribute it to religious belief. Fortunately, the practice is on the wane now and in many places has been made illegal. Following circumcision and infabulation, union of raw surfaces gives rise to unyielding scar tissue which may cause serious coital difficulties so much so that at times this tissue has to be surgically removed. One

can understand that there can be serious obstruction to delivery as well.

5. *Radiation*: Treatment of various gynaecological disorders, usually malignancy, with radiation is resulting in an increasing number of cases of vaginal stenosis due to radiation necrosis and later contractures.

In the case under consideration prolonged labour caused extensive necrosis and sloughing of the vaginal mucosa which healed by adhesions between the anterior and posterior vaginal walls. There was no history suggestive of chemical vaginitis.

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References

1. Frith, K.: J. Obst. & Gynec. Brit. Cwlth. 67: 80, 1960.
2. Hassan, A. M.: J. Obst. & Gynec. Brit. Cwlth. 70: 495, 1963.
3. Hathout, H. M.: J. Obst. & Gynec. Brit. Cwlth. 70: 505, 1963.
4. Mustafa, A. Z.: J. Obst. & Gynec. Brit. Cwlth. 73: 302, 1966.
5. Sequeira, J. H.: Lancet. 2: 1054, 1931.