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■ Case Report

Primigravida in Labour Following Spontaneous Pregnancy with Microperforated Hymen: Concomitant Emergency Caeserean Section and Hymenectomy. A Rare Case Report.

Matthew Fijabiyi[1], Mayowa Salawu[2], Toyin Fijabiyi[3], Adegoriola Ojurongbe[4], Adeola Afolabi[4] , Adebayo Adekunle[1].

[1]Department of Obstetrics and Gynaecology, College of Health Sciences, Ladoke Akintola University of Technology, Ogbomoso, Oyo State.
[2]Doctors with Africa (CUAMM), Cueibet County, Lakes State. South Sudan.
[3]Department of Family Medicine, Federal Medical Centre Keffi, Nasawara State.
[4]Department of Obstetrics and Gynaecology, Federal Medical Centre Keffi, Nasawara State

ABSTRACT

Microperforated (pinhole) hymen is considered a rare anomaly of the female genital tract with considerable untoward consequences on the quality of life. The associated problems include difficulty in achieving penetrative vaginal intercourse, infertility, and psychological issues among others. This is a case report of a primigravida with spontaneous pregnancy who presented following referral from primary health centre where she was receiving her antenatal care at term in labour on account of absence of vagina opening. Pelvic examination revealed micro-perforated hymen. She had concomitant emergency caesarean section and hymenectomy done after counselling and informed consent. Her immediate post-operative care and followed up at the post-natal clinic were satisfactory with subsequent penetrative vaginal intercourse without discomfort. It was concluded that proper and detailed pelvic examination should be done for every pregnant woman at booking clinic to detect any possible anomaly of the external genitalia. Also, concomitant caesarean section and hymenectomy is safe, reduces cost and improves quality of life.

KEYWORDS: Microperforated hymen, penetrative sexual intercourse, labour assessment challenge, hymenectomy, Caeserean section.

INTRODUCTION

Anomalies of the female genital tract have a considerable untoward consequence on the quality of life. These may vary from its negative influence on the menstrual function, sexual activity, infertility among other psycholological problems.[1]

Dr Fijabiyi Matthew Olusegun
Consultant Obstetrician and Gynecologist/ Lecturer 1
Department of Obstetrics and Gynecology
College of Health Sciences
Ladoke Akintola University of Technology,
Ogbomoso Oyo State.PMB 4000.

Anomalies of the hymen occur due to failure or incomplete canalization of the central portion of the hymenal tissue leading to either a total or subocclusive vaginal pathology. The spectrum of this congenital malformation varies from imperforate, microperforated, cribrifom and septate hymen. [2,3]

Microperforated (pinhole) hymen is a considerably rare entity and the incidence is not well known.[3] This hymenal subocclusive

developmental abnormality in contrast to imperforate hymen has a small aperture on the hymenal membrane for normal menstrual flow.[3] Presentation is usually delayed, and most diagnosis are made after puberty especially at coitache when the partner fails in achieving penetrative vaginal intercourse or severe dyspareunia following attempt at sexual intercourse.[2,3] Surprisingly, spontaneous pregnancy may occur due to passage of spermatozoa through the tiny hole in the hymen amidst the difficulty in penetrating vagina.[4,5]

One major challenge encountered in patient with late diagnosis of microperforate hymen who presents in labour is labour assessment challenge, as the hymenal membrane covers the vaginal canal at the introitus thus hindering cervical assessment and making it impossible to monitor progress of labour. In addition, delay in operative delivery may result in arrest of labour with resultant maternal morbidity. [6] This case report aims to describe a rare presentation of a primigravida in labour with delayed diagnosis of microperforated hymen.

CASE REPORT

A 20 yrs old booked elsewhere primigravida at 38 weeks 5 days was referred from primary health centre where she earlier presented following 4 hours of labour pains. She was receiving her routine antenatal care from the same healthcare facility, but she was referred when it was noticed that her vaginal orifice was occluded with only a tiny hole when vaginal examination was about to be performed. She has been married for a year and several attempts by her partner to have penetrative vaginal intercourse resulted in serious pain and was unsuccessful. She attained menarche at 14 years and has been menstruating for 8 days in regular 29 days cycle, no menstrual abnormality was reported. Pregnancy was suspected when she missed her period, diagnosed with urine pregnancy test and confirmed with obstetric scan at gestational age of 8 weeeks, which showed a viable intra-uterine gestation.

On examination, she was a young woman with normal development of secondary sex characteristics. She was in painful distress, not pale, anicteric and well hydrated. Abdomen revealed a gravid uterus with symphysiofundal height of 37 centimeters, habouring a singleton fetus in longitudinal lie, cephalic presentation. She was having 3 contractions every 10 minutes each contraction lasted about 40 seconds. Fetal heart was 140 beats per minute and was regular. Visual examination of the external genitalia revealed a membrane of hymenal tissue with a tiny hole at the middle at the introitus about 3cm inferior to the urethral orifice. Further pelvic examination could not be done; thus, the cervical dilatation could not be assessed. Rectal examination was done and essentially normal. She had an urgent scan which revealed a live fetus at estimated gestational age of 39 weeks 1 day.

She was counseled for concomitant emergency caeserean section and hymenectomy, informed

consent was obtained. Preoperative investigations were done, and 2 units of blood was crossed match for the procedures. She eventually had caeserean section under spinal anaesthesia and a live male neonate with birth weight of 3.1kg and Apgar score of 8 and 9 in 1st and 5th minutes respectively was delivered. At the completion of anterior abdominal wall closure, she was placed in lithotomy position and with urethral catheter in-situ, the location of urethra was noted before making the cruciate incision on the hymen in order to avoid iatrogenic urethral injury. The procedure of hymenectomy was performed by making a cruciate incision on the hymen across the area with the aperture with the aid of surgical blade. Excision of redundant fragments of the membrane was done with Mayo scissors and edges was sutured with vicryl 0 suture to secure haemostasis. Vaginal examination was done with the middle and index fingers to ascertain the patency of the vaginal canal and to rule out vaginal septum. The procedures were well tolerated, and she had a satisfactory post-operative period. She was placed on intravenous fluid, antibiotics, analgesics, and haematinics. She was discharged home on POD 4 in a stable and joyous state. She was advised to maintain good perineal hygiene, change of perineal pad at frequent interval, and also to do sitz baths three times daily to reduce vulva discomfort and facilitate healing, and to avoid sexual intercourse until healing is ascertained. Furthermore, to present in the hospital if she develops fever or abnormal vaginal discharge. She was seen at postnatal clinic after 2 weeks without complaint, her abdominal wound and vagina incision site had healed satisfactorily. Pelvic examination was done to assess the patency of the vagina and its capacity. Her second postnatal visit was done after a month, she remained stable and had commenced normal penetrative vaginal intercourse without discomfort.

DISCUSSION

Microperforated hymen, a subtype of occlusive hymenal abnormality is associated with a pin hole opening in the hymen, which preclude penetrative vaginal intercourse, varying degree of menstrual dysfunctions, recurrent vulvovaginitis, urinary tract infection, pelvic pain, infertility among many others.[1,7] Ultimately, hymenal anomalies constitute a significant morbidity and negatively impact the quality of life.[2,3] The index case had no menstrual anomaly due to the sub-occlusive nature of her hymen which permits egress of menses but she could

not achieve penetrative vaginal intercourse. She eventually had spontaneous pregnancy despite the intact hymenal membrane, corroborating previous case reports of similar rare occurence.[5,] Thus reiterating the fact that microperforated hymen is not synonymous with infertility.

The decision to perform concomitant caeserean section and hymenectomy was made since appropriate diagnosis of labour and proper monitoring of progress of labour could not be done due to lack of access to the cervix. This mode of delivery is highly favoured especially when such diagnosis is made in labour.[5,6,8] In this scenerio, it became important that hymenectomy was done in order to facilitate free flow of lochia. The prospect lies in the prevention of morbidity which could potentially occur should ascending infection from organisms colonising the lower genital tract moves towards the accumulated blood within the vaginal canal and endometrial cavity. [9]

IMPLICATIONS FOR CLINICAL PRACTICE.

Although spontaneous pregnancy could rarely occur in microperforated hymen, many suffer psychosexual and reproductive sequel due to delay in diagnosis till puberty or even later in adult life. A holistic approach to examination of prepubertal girls should be advocated to foster early diagnosis. In addition proper genital examination should be done for pregnant woman at booking clinic in order to detect any possible external genitalia anomaly that might have been missed prior to pregnancy.

Lastly, concomitant caeserean delivery and hymenectomy is safe and in the event of hymenal anomaly in labour, carrying out these two surgeries might reduce cost, postpartum sepsis and improve quality of life.

CONFLICT OF INTEREST: None

PATIENT CONSENT: informed consent was obtained before pictures were taken and the information provided in this case report was with full permission of the patient.

DISCLOSURE : None

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