# Imperforate hymen with cryptomenorrhae in a 14 year old girl: a case report

<sup>1</sup>Umar-Sulayman H., <sup>1</sup>Sule I. B., <sup>1</sup>Barde A.S.

<sup>1</sup>Department of Obstetrics and Gynaecology, General Hospital Minna, Niger State.

Corresponding Author:

Umar-Sulayman H., Department of Obstetrics and Gynaecology, General Hospital Minna, Niger State. Email: <u>hajaratuumar@gmail.com</u>

## Abstract

## Introduction

Imperforate hymen is a rare congenital obstruction of the vagina that is associated with accumulation of uterovaginal secretions often producing hydrometrocolpos.

## Methodology/Results (Case report)

This is a report of miss A. B., a 14 year old premenarchial secondary school student who presented to our unit in July 2010 with three months history of progressive abdominal swelling and six months history of cyclical lower abdominal pain. There was no history of bleeding per vaginum. On examination her general condition was satisfactory and her vital signs were stable. Abdominal examination revealed a 30 weeks size pelvic mass which was tense and non tender. Vaginal examination showed normal external genitalia with a tense, bulging imperforate hymen. After investigations a diagnosis of imperforate hymen with cryptomenorrhea was made. The patient had cruciate incision of the hymen done with gentle evacuation of about 2 litres of altered blood. She had a good post operative recovery and was discharged home five days later. She had regular normal follow up visits.

#### Conclusion

Imperforate hymen with Cryptomenorrhea is a rare surgically correctable condition which in severe untreated forms may lead to infertility and urinary retention.

Keywords: Imperforate hymen, Crptomenorrhea, Nigerian, Secondary school student

# Introduction

Imperforate hymen is the result of the failure of canalization of the vaginal plate, which is formed in part of the Mullerian ducts and from the urogenital sinus. A rare condition of congenital imperforate hymen has been presented in which obstruction of the vagina was associated with accumulation of uterovaginal secretions produced under circulating maternal estrogen stimulation, and the development of a hydrometrocolpos. Large hematocolpos may lead to secondary oligoamniosis, due to renal obstruction.<sup>1,2</sup>

# Methodology/Results (Case report)

Miss A. B who was a 14 year old premenarchial secondary school student who presented to our unit with three months' history of progressive abdominal swelling and six months history of cyclical lower abdominal pain. There was no history of bleeding per vaginum and no urinary symptoms. She had noticed breast enlargement and pubic hair two years prior to presentation.

On examination her general condition was satisfactory and her vital signs were stable. Abdominal examination revealed a 30 week size pelvic mass which was tense and non tender. Vaginal examination showed normal external genitalia with a tense, bulging imperforate hymen (figure 1).



Figure 1: Imperforate Hymen

Investigations showed normal Haemoglobin count (12g/dl), Electolytes & Urea and IVU were normal. Abdomino- Pelvic Ultrasound Scan revealed Haematocolpos, Haematometria and right Haematosalpinx. A diagnosis of Imperforate Hymen with

Cryptomenorrhea was made.

She was subsequently optimisized and planned for hymenectomy after due counselling of the patient and guardians. Intra operatively a cruciate incision of the hymen done (Hymenectomy) with gentle evacuation of about 2 litres of altered blood, in the semi recumbent position (figure 2).



Figure 2: Immediate post operative state, patent vagina

She had a good post operative recovery and she continued to have free drainage of blood for four days post operatively. She was closely observed and discharged home five days later. She had regular uneventful follow up visits and since then has had normal menstruation.

# Discussion

Imperforate hymen is most commonly an isolated finding and usually remains asymptomatic until puberty, like in the case of Miss. A.B. Rarely, symptoms of imperforate hymen manifest antenatally as well as in the neonatal period.<sup>3</sup> This

underscores the need for doctors as well as midwives who take deliveries to routinely examine the female newborn for such congenital problems which could lead to distress to parents and the patient later in life.

Young girls who present with primary amenorrhea, cyclical abdominal pain and /or abdominal mass could likely have this easily treatable condition, and should be ruled out. If left untreated, imperforate hymen could lead to haemtocolpos, haematometra and haematosalpinx which can damage the internal reproductive organs of the female. These may lead to infertility and urinary retention.<sup>1,4</sup>

Miss A.B. however had a successful surgery (hymenectomy) and resumed normal menstruation thereafter.

## Conclusion

Imperforate hymen with Cryptomenorrhea is a rare surgically correctable condition which in severe untreated forms may lead to infertility and urinary retention.

#### References

- Karteris E, Foster H, Karamouti M, and Goumenou A. Congenital Imperforate Hymen with Hydrocolpos and Hydronephrosis associated with Severe Hydramnios and Increase of Maternal Ovarian Steroidogenic Enzymes. J Pediatr Adolesc Gynecol. 2010; 23: 136-14.
- El- Messidi A, and Flemming NA. Congenital Imperforate Hymen and Its Life-threatening Consequences in the Neonatal Period; J Pediatr Adolesc Gynecol (2006) 19: 99–103.
- 3. Deligeoroglou E, Deliveliotou A, Evaggelos M, and Creatsas G. Concurrent imperforate hymen, transverse vaginal septum, and unicornuate uterus: A case report. Jour. Paed. Surg. Aug 2007; 42 (8): 1446-1448.
- Arikan II, Harma M, Harma MI, Bayar U, Barut A, and Herlyn-Werner-Wunderlich syndrome uterus didelphys, blind hemivagina and ipsilateral renal agenesis) - a case report; J Turkish-German Gynecol Assoc 2010; 11: 107-9.

Conflict of interest: Nil