



Acute abdomen (*Udarshool*) with retention of urine (*Mutrasang*) in an adolescent girl with *Cryptomenorrhoea*: A case report

Vivek Jog^{*1}, Rakesh Nayak²,

Professor & HOD¹, Associate Professor²,

Department Of PTSR, MIAER, Mandsaur -458001

*Corresponding Author: vivekjog@gmail.com, 9075666139

Abstract:

Normal onset of menarche is anywhere between 13 and 16 years of age, with peak time being 13 years of age. Ayurveda texts mention 12 years as age of menarche. There may be late onset of menarche in few patients, but such cases sometimes are left unattended and untreated in rural population. Even if an adolescent female patient is physiologically normal and is menstruating inside, and there is an external genital organ developmental anomaly /abnormality which is obstructing the outward flow of menstrual blood e.g. Imperforate hymen, menstrual blood fails to come out of vagina and gives rise to a condition called cryptomenorrhoea. As blood tends to accumulate in every cycle, hematometra and *hematocolpos* develops. Such patient may present as a patient of acute abdomen with urine retention with complaints of delayed menarche which may

even require immediate surgical intervention to relieve the pain

Keywords: Amenorrhoea, cryptomenorrhoea, hematometra, *hematocolpos*

Introduction:

Normal onset of menarche is anywhere between 13 and 16 years of age, with peak time being 13 years of age. Ayurveda texts mention 12 years as age of menarche¹. There may be late onset of menarche in few patients, but such cases sometimes are left unattended and untreated in rural population. Even if an adolescent female patient is physiologically normal and is menstruating inside, and there is an external genital organ developmental anomaly /abnormality which is obstructing the outward flow of menstrual blood e.g. Imperforate hymen, menstrual blood fails to come out of vagina and gives rise to a condition called cryptomenorrhoea². As blood tends to accumulate in every cycle,

hematometra and *hematocolpos* develops. Such patient may present as a patient of acute abdomen with urine retention with complaints of delayed menarche which may even require immediate surgical intervention to relieve the pain.

Case report:

Presentation of patient-

A 17 year old female patient came to OPD of *Streerog – Prasutitantra* department with complaints of severe abdominal pain, 2-3 episodes of vomiting and diminished urination since last night. She was taken to the examination room with initial registration process.

History-

She and her mother both were present at the time of consultation. As per their information, the patient had no history of any major medical or surgical condition. She was otherwise fine till last night. She has no issues of passing urine/stool till last night. She previously had experienced episodes of pain in lower abdomen over a few years, in which she would usually feel relieved after medication from their family doctor. Only this time it was severe in nature.

Examination-

On general examination, she was normotensive (BP 110/70 mm of Hg), stable with no pallor. There was mild tachycardia (HR-104bpm). By appearance of patient, it was clear that she was experiencing agonising pain in her lower abdomen. Her lower abdomen was distended and

tenderness was easily demonstrable. Suspecting distended bladder, simple rubber catheterization was done. During insertion of catheter, it was seen that she has imperforate bulging hymen. Emptying the bladder did not relieve her pain, and lower abdomen was still distended. And degree of her pain was unaltered. A distended mobile uterus was felt on deep abdominal palpation to feel pelvic cavity.

Diagnosis-

By inspection and examination of her vagina, it was clear that she was a patient of Imperforate hymen and consequent cryptomenorrhea³. She was experiencing pain because of ongoing menstruation as well as pre-existing hematometra and *hematocolpos*. Persistent pressure symptoms may have caused retention of urine and probable urethritis/ UTI.

Investigation:

Her CBC was done, which came normal.

Treatment plan:

She was administered intramuscular inj. diclofenac for pain relief, but her pain did not subside.

Her condition was discussed with her relatives. They were convinced that she needed relief from pain and hence hymenotomy was necessary. Consent was taken and procedure of hymenotomy was carried out.

Procedure: As there was no availability of USG report, hence surgical confirmation of *cryptomenorrhea* was necessary.

Lithotomy position given to patient. A local infiltration *anesthesia* was given around hymen after painting and draping. A sterile large bore needle (no.16) was inserted in vagina through the bulging hymen perpendicular to the hymen surface. A gush of blackish brown thick viscous blood seen coming out of the needle hub. Hence diagnosis of *hematocolpos* was confirmed.

Hymenotomy - A cruciate incision made on the hymen with surgical blade no.10 and occult blood collected in a kidney tray and measured. Flow of blood was facilitated by gentle pelvic pressure.

Patients was immediately relieved from her pain. And even her HR settled to 80bpm within half hour after the procedure.

She was observed for vitals and discharged in the evening with supportive medications.

Discussion:

Imperforate hymen is relatively uncommon congenital anomaly of the female reproductive system, in which the hymen completely obstructs the vaginal opening. Incidence of imperforate hymen is 0.05% to 0.1%. Imperforate hymen obstructs vaginal secretions and uterine blood flow and gives rise to *hematocolpos*, causing amenorrhea and cyclic pelvic pain. It may also be associated with other developmental anomalies.

Imperforate hymen often diagnosed in adolescent girls after menarche, mainly presenting with amenorrhea and lower abdominal pain or urinary retention. Although it is a relatively non-serious disorder, late detection and diagnosis may

lead to severe morbidity and requires additional intervention. Most young girls with imperforate hymen are asymptomatic and diagnosed only after incidental examination or after onset of symptoms. Rarely in newborns, due to influence of maternal *estrogen*, vaginal secretions may give rise to *hydrocolpos*.

Despite the simple diagnosis of imperforate hymen, missed/ delayed diagnosis happens due to rare occurrence, nonspecific presentation and non-cooperation during examination or insufficient examination. Therefore, whenever an adolescent girl presents with abdominal pain or urine retention, she must be examined with imperforate hymen as a suspicion in mind.

Upon presentation of patient, imperforate hymen is diagnosed by inspection of external genitalia, where bulging, bluish hymenal membrane is seen with boggy appearance on palpation.

Treatment of choice is hymenotomy⁴ i.e. cruciate incision of hymen.

Principle of treatment of imperforate hymen as per Ayurveda-

As per text from *Sushrut Samhita*⁵ wherever there is collection of fluid/pus i.e. *doshasanchay* and hence swelling/ i.e. *utsang* is present, incision i.e. *vranakarma* should be performed to make the way for collection i.e. *sanchitdosh*.

Conclusion-

Every patient should be examined thoroughly before making a provisional diagnosis. Symptoms *sometimes* may lead a

physician/surgeon to a different diagnosis but distinguishing characters of presentation or signs help us to diagnose properly. Adolescent menstrual history should never be overlooked in practice. Principles of *shastrakarma* mentioned by Sushruta still hold its place in surgical practice.

References:

1. Prof. (km) Tiwari P. V., (2000) Prasuti tantra evam striroga part 2, Hindi commentary, Chaukhamba Orientalia, Varanasi, chapter 2 page 168.
2. Dr Hemalatha Kapoorchand, (2018) striroga part 2, Hindi & English commentary, Chaukhamba Vishvabharati, Varanasi, chapter 4 page 130
3. Modern Gynecology (2017), 4th edition, English commentary, publisher APC by Ajit virkud Text Book of Gynecology (2022), 3rd

edition, English commentary, publisher Paras Medical Publisher by Dr Sheila Balakrishan

4. Shastri Ambika Datt, Sushruta Samhita by Ma harishi Sushruta with Ayurveda Tattva
5. Sandipika Commentary by, Chaukhambha Sanskrit Sansthan, Varanasi, Eleventh Edition, Vol.1, 1997. Shareera sthana, Chapter 10/5

*Note: Following Pictures: Please contact Corresponding author

1. Imperforate hymen is visible
2. Diagnosis is confirmed when occult blood came out from a needle inserted in vagina through the hymen
3. Cruciate incision made on hymen i.e. hymenotomy
4. Incision extended with artery forceps
5. Occult blood collected in kidney tray and its volume is measured later.

Conflict of Interest: Non

Source of funding: Nil

Cite this article:

Acute abdomen (Udarshool) with retention of urine (Mutrasang) in an adolescent girl with cryptomenorrhoea : A case report

Vivek Jog, Rakesh Nayak,

Ayurlog: National Journal of Research in Ayurved Science- 2023; (11) (05): 01- 04