A Prolapsed Longitudinal Vaginal Septum with Invaginating Cystocele and Rectocele: A Rare Presentation with a Unique Management

A.R. Vijaylakshmi and Suvarna Rai*
Department of Obstetrics & Gynecology, Malla Reddy Institute of Medical Sciences, Hyderabad, India

Abstract

Longitudinal vaginal septum is a well-known anomaly of the female genital tract. It is usually diagnosed in early reproductive life due to symptoms like difficulty inserting tampons, dyspareunia and anorexia. Most other cases get diagnosed and treated during delivery. Those who surpass all these stages usually remain asymptomatic thereafter. We report a parous woman who approached us four years after her second delivery with a prolapsed longitudinal vaginal septum with a broad base into which cystocele and rectocele were invaginating but was not associated with uterocervical prolapse. Usually their correction is a simple surgery involving only excision of the septum. But our case demanded longitudinal splitting of the vaginal septum, performing anterior and posterior colpopereineorrhaphy followed by approximation of the normal vaginal mucosa. To the best of our knowledge no other case of isolated prolapsed longitudinal vaginal septum with such tailored surgical management has been reported.

Keywords: Longitudinal vaginal septum; Prolapse; Cystocele; Rectocele

Introduction

Vaginal Septa are developmental defects of the female genital tract. Embryologically, the vagina develops in two parts. The upper 2/3rd portion develop from the fused Mullerian ducts and the lower portion from the fused sinovaginal bulbs. These sinovaginal bulbs arise as two swellings from the endoderm of the urogenital sinus. Vaginal plate forms at the junction of the sinovaginal bulbs and the Mullerian ducts. This vaginal plate canalizes to form the vagina [1].

The transverse vaginal septum occurs because of defective fusion of the Mullerian duct to the urogenital sinus i.e. persistence of the vaginal plate.

The longitudinal vaginal septum of the upper two third of the vagina occurs due to defective fusion of the Mullerian ducts and are usually associated with septate uterus and uterus didelphys. They usually appear as double barreled cervix and vagina [2].

Improper fusion of the sino vaginal bulbs causes partial longitudinal vaginal septum of the lower one third of the vagina, as in our case.

Many patients are asymptomatic and the diagnosis of longitudinal vaginal septa is established incidentally. Few of them present as adolescents, some with sexual problem and others during labor. We report a patient who approached us with a rare presentation of longitudinal vaginal septum and was managed surgically with a technique that was unique to her.

Case Presentation

A 29 year old Para 2 living 2 abortions 0 lady with both full term normal vaginal deliveries in the past came to us with complaints of “something coming out of vagina” and “difficulty during intercourse” of one year duration. She had delivered two babies of 4 and 4.2 kgs, 5 and 3 years back respectively. Both the deliveries were “uneventful” in her own words. Due to extreme discomfort she has avoided sexual intercourse for the past 6 months. She had no history of similar complaints and condition in her family. She had no history of any medical diseases or surgeries or medications in the past. On examination we found a completely prolapsed thick and fleshy longitudinal vaginal septum in the lower one third of the vagina (Figure 1) about 8 cm long and 3cm broad at the base (Figure 2) starting immediately underneath the urethra anteriorly with a moderate cystocele invaginating into it and posteriorly a moderate rectocele invaginating into it similarly. The cervix was high up inside the vagina which indicated that there was no utero cervical prolapse (Figure 3).

Investigations

She underwent MRI pelvis to rule out other associated anomalies of the genital tract (Figure 4). The uterus and fallopian tubes were normal. The MRI and perineal ultrasonography showed neither bladder nor rectum were seen as the content of the septum although they were seen invaginating into its base both anteriorly and posteriorly. She underwent a diagnostic hysteroscopy which showed a normal uterine cavity and patent tubal ostia.

Treatment

The patient was operated in lithotomy position under spinal anesthesia. The mucosa over the vaginal septum was split open longitudinally (Figure 5) and then the septum was incised in the center after confirming the extent of the bladder and rectum (Figure 5). The cystocele and the rectocele were carefully dissected. Anteriorly, cystocele repair and anterior colpopereineorrhaphy was done. Posteriorly, rectocele repair and posterior colpopereineorrhaphy was performed (Figure 5) after excising the excess redundant mucosa of the septum (Figure 5). The vaginal mucosa was approximated well after that.

Keywords: Longitudinal vaginal septum; Prolapse; Cystocele; Rectocele

Introduction

Vaginal Septa are developmental defects of the female genital tract. Embryologically, the vagina develops in two parts. The upper 2/3rd portion develop from the fused Mullerian ducts and the lower portion from the fused sinovaginal bulbs. These sinovaginal bulbs arise as two swellings from the endoderm of the urogenital sinus. Vaginal plate forms at the junction of the sinovaginal bulbs and the Mullerian ducts. This vaginal plate canalizes to form the vagina [1].

The transverse vaginal septum occurs because of defective fusion of the Mullerian duct to the urogenital sinus i.e. persistence of the vaginal plate.

The longitudinal vaginal septum of the upper two third of the vagina occurs due to defective fusion of the Mullerian ducts and are usually associated with septate uterus and uterus didelphys. They usually appear as double barreled cervix and vagina [2].

Improper fusion of the sino vaginal bulbs causes partial longitudinal vaginal septum of the lower one third of the vagina, as in our case.

Many patients are asymptomatic and the diagnosis of longitudinal vaginal septa is established incidentally. Few of them present as adolescents, some with sexual problem and others during labor. We report a patient who approached us with a rare presentation of longitudinal vaginal septum and was managed surgically with a technique that was unique to her.

Case Presentation

A 29 year old Para 2 living 2 abortions 0 lady with both full term normal vaginal deliveries in the past came to us with complaints of “something coming out of vagina” and “difficulty during intercourse” of one year duration. She had delivered two babies of 4 and 4.2 kgs, 5 and 3 years back respectively. Both the deliveries were “uneventful” in her own words. Due to extreme discomfort she has avoided sexual intercourse for the past 6 months. She had no history of similar complaints and condition in her family. She had no history of any medical diseases or surgeries or medications in the past. On examination we found a completely prolapsed thick and fleshy longitudinal vaginal septum in the lower one third of the vagina (Figure 1) about 8 cm long and 3cm broad at the base (Figure 2) starting immediately underneath the urethra anteriorly with a moderate cystocele invaginating into it and posteriorly a moderate rectocele invaginating into it similarly. The cervix was high up inside the vagina which indicated that there was no utero cervical prolapse (Figure 3).

Investigations

She underwent MRI pelvis to rule out other associated anomalies of the genital tract (Figure 4). The uterus and fallopian tubes were normal. The MRI and perineal ultrasonography showed neither bladder nor rectum were seen as the content of the septum although they were seen invaginating into its base both anteriorly and posteriorly. She underwent a diagnostic hysteroscopy which showed a normal uterine cavity and patent tubal ostia.

Treatment

The patient was operated in lithotomy position under spinal anesthesia. The mucosa over the vaginal septum was split open longitudinally (Figure 5) and then the septum was incised in the center after confirming the extent of the bladder and rectum (Figure 5). The cystocele and the rectocele were carefully dissected. Anteriorly, cystocele repair and anterior colpopereineorrhaphy was done. Posteriorly, rectocele repair and posterior colpopereineorrhaphy was performed (Figure 5) after excising the excess redundant mucosa of the septum (Figure 5). The vaginal mucosa was approximated well after that.

Keywords: Longitudinal vaginal septum; Prolapse; Cystocele; Rectocele

Introduction

Vaginal Septa are developmental defects of the female genital tract. Embryologically, the vagina develops in two parts. The upper 2/3rd portion develop from the fused Mullerian ducts and the lower portion from the fused sinovaginal bulbs. These sinovaginal bulbs arise as two swellings from the endoderm of the urogenital sinus. Vaginal plate forms at the junction of the sinovaginal bulbs and the Mullerian ducts. This vaginal plate canalizes to form the vagina [1].

The transverse vaginal septum occurs because of defective fusion of the Mullerian duct to the urogenital sinus i.e. persistence of the vaginal plate.

The longitudinal vaginal septum of the upper two third of the vagina occurs due to defective fusion of the Mullerian ducts and are usually associated with septate uterus and uterus didelphys. They usually appear as double barreled cervix and vagina [2].

Improper fusion of the sino vaginal bulbs causes partial longitudinal vaginal septum of the lower one third of the vagina, as in our case.

Many patients are asymptomatic and the diagnosis of longitudinal vaginal septa is established incidentally. Few of them present as adolescents, some with sexual problem and others during labor. We report a patient who approached us with a rare presentation of longitudinal vaginal septum and was managed surgically with a technique that was unique to her.

Case Presentation

A 29 year old Para 2 living 2 abortions 0 lady with both full term normal vaginal deliveries in the past came to us with complaints of “something coming out of vagina” and “difficulty during intercourse” of one year duration. She had delivered two babies of 4 and 4.2 kgs, 5 and 3 years back respectively. Both the deliveries were “uneventful” in her own words. Due to extreme discomfort she has avoided sexual intercourse for the past 6 months. She had no history of similar complaints and condition in her family. She had no history of any medical diseases or surgeries or medications in the past. On examination we found a completely prolapsed thick and fleshy longitudinal vaginal septum in the lower one third of the vagina (Figure 1) about 8 cm long and 3cm broad at the base (Figure 2) starting immediately underneath the urethra anteriorly with a moderate cystocele invaginating into it and posteriorly a moderate rectocele invaginating into it similarly. The cervix was high up inside the vagina which indicated that there was no utero cervical prolapse (Figure 3).

Investigations

She underwent MRI pelvis to rule out other associated anomalies of the genital tract (Figure 4). The uterus and fallopian tubes were normal. The MRI and perineal ultrasonography showed neither bladder nor rectum were seen as the content of the septum although they were seen invaginating into its base both anteriorly and posteriorly. She underwent a diagnostic hysteroscopy which showed a normal uterine cavity and patent tubal ostia.

Treatment

The patient was operated in lithotomy position under spinal anesthesia. The mucosa over the vaginal septum was split open longitudinally (Figure 5) and then the septum was incised in the center after confirming the extent of the bladder and rectum (Figure 5). The cystocele and the rectocele were carefully dissected. Anteriorly, cystocele repair and anterior colpopereineorrhaphy was done. Posteriorly, rectocele repair and posterior colpopereineorrhaphy was performed (Figure 5) after excising the excess redundant mucosa of the septum (Figure 5). The vaginal mucosa was approximated well after that.
Longitudinal vaginal septa are classified into complete and partial septa. Partial longitudinal vaginal septa are further divided into high and low partial longitudinal septa. The commonest septa are complete and high partial septa [3]. These are usually associated with other Mullerian anomalies like septate uterus and uterus didelphys [4]. Less than 1% of cases with longitudinal vaginal septum had a normal uterus, cervix and vagina above the septum [4]. We understand that low partial vaginal septa are rather rare although their exact incidence cannot be quoted.

Previous studies have shown that about 60% of patients with longitudinal vaginal septa are asymptomatic and they get diagnosed incidentally. Usual clinical presentations include difficulty in insertion of vaginal tampons, dyspareunia, aperneia and bleeding during coitarche in early reproductive life. Many others present in labor with vaginal dystocia [5], tear and obstruction to the delivery of the head.

Those who surpass these stages uneventfully usually remain asymptomatic for the rest of their lives. Our patient approached us with a rare clinical presentation which has never been reported to the best of our knowledge.

Outcome and Follow-up

The patient was reviewed at our hospital 6 weeks after the surgery. The vaginal septum, the cystocele and rectocele were completely rectified (Figure 6). Her sexual life had improved drastically thereafter.

Discussion

Vaginal septa are congenital defects of the female genital tract. Vaginal Septa are of two types: longitudinal and transverse. Transverse vaginal septa occur in about 1 in 30,000 to 1 in 80,000 women [1].
of our knowledge. She came to us years after two uneventful vaginal deliveries with a complaint of recent onset dyspareunia. Much to our surprise, we found the cause to be a prolapsed low partial longitudinal vaginal septum with cystocele and rectocele but no utero cervical descent.

Generally, management depends upon the type of septum. Longitudinal vagina septum of the upper two thirds of the vagina is usually excised hysteroscopically [6]. If it is associated with uterine septum, then the latter can also be dealt with by hysteroscopy. Surgical excision of the septum is the treatment of choice for a low partial vaginal septum in symptomatic patients [7,8]. Previous case reports demonstrate septoplasty during second stage of labor too [7]. Our patient would not have benefited from this traditional surgery because the cut ends of the septum would have continued to prolapse out of the vagina due to the associated cystocele and rectocele at its base. Hence, a modification to its management was made. This unique surgical technique seems to be the only answer for such a rare presentation of the disease.

Learning Points

- Longitudinal Vaginal Septa which are not excised during vaginal deliveries do not always remain silent for lifetime. They have a possibility of presenting later in life with prolapse which occurs due to overstretching of the septum by the fetal head at the time of delivery.
  - An isolated prolapsed longitudinal vaginal septum without associated utero cervical descent is an extremely rare manifestation of it.
  - Simple surgical excision of a prolapsed longitudinal vaginal septum with associated cystocele and rectocele is an insufficient management. Longitudinal splitting of the vaginal septum, reduction of cystocele and rectocele combined with anterior and posterior colpopерineorraphy is required.

References