Bicornuate Uterus with Unilateral Fibroid - Surgical Procedure or LNG-IUS – A Conservative Approach in a Patient Who Opted LNG as Contraception

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INTRODUCTION

Bicornuate uterus with leiomyoma is rare. A 30 - year - old patient with bicornuate uterus with fibroid presented with abnormal - uterine - bleeding and was treated non - surgically with LNG - IUS. Uterine fibroids and AUB affect the quality of life and remain a leading indication for hysterectomy. In young women, uterine preservation approaches should be preferred as far as possible.

Abnormalities in fusion or formation of Mullerian duct results in uterine structural and functional abnormalities.[1] One of the Mullerian duct anomalies, bicornuate uterus, occurs due to incomplete fusion of utero-vaginal horns at the level of fundus. Bicornuate uterus is the most common Mullerian duct anomaly (25 % of cases)[2,3] and association of bicornuate uterus with leiomyoma is very rare and there have been very few cases reported till now.[4,5] A case of bicornuate uterus with unilateral fibroid is being reported who presented with abnormal uterine bleeding and pelvic pain and was treated non-surgically with LNG - IUS.

PRESENTATION OF CASE

A 30 - year - old woman came to obstetrics and gynaecology OPD in All India Institute of Medical Sciences (AIIMS), Rishikesh, in the month of July 2019 with chief complaints of pain in left lower abdomen and back with painful menstruation (5 - 6 days) and heavy menstrual bleeding since last one year. Her cycles were regular and last menstrual period was on 25 June 2019. She was P_2L_2 and both born via Lower Segment Caesarean Section (LSCS) at full term in view of transverse lie. Patient was not aware of bicornuate anomaly and no records were available of previous caesarean. On general examination, there was mild pallor, average built (BMI 25.32 Kg / m^2), secondary sexual characteristics well developed, systemic examination was normal. On per abdomen examination, there was tenderness in left lower abdomen and suprapubic region. External genitalia were normal. Per-speculum examination was normal and per-vaginal examination revealed bulky uterus, very firm nodular on left side and tenderness present in left fornix. Routine blood investigations were normal except mild anaemia (Table 1). Transvaginal ultrasound showed bicornuate uterus with a 4 X 4 cm fibroid in left uterine horn. Patient was given injection leuprolide acetate 3.75 mg, Endometrial aspiration was done and sample was sent for Histopathological Examination, ZN staining and gene expert. Histopathology report showed proliferative endometrium. LNG - IUS insertion was in left horn under ultrasound guidance (Figure 1 & Figure 2). Follow up ultrasound after 3 months showed decrease in size of fibroid from 4 X 4 cm to 2.3 x 4.6 cm.

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On further follow up after 6 months, repeat USG abdomen and pelvis showed decrease in the size of fibroid to 2.2 x 3.0 cm though by this time there was no effect of Leuprolide acetate. On follow up in December 2019, fibroid size further decreased to 0.2 cm x 3 cm (Figure 3) and patient had relief in symptoms and improved quality of life.

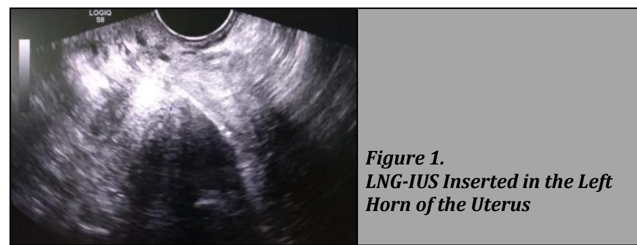

Figure 1. LNG-IUS Inserted in the Left Horn of the Uterus

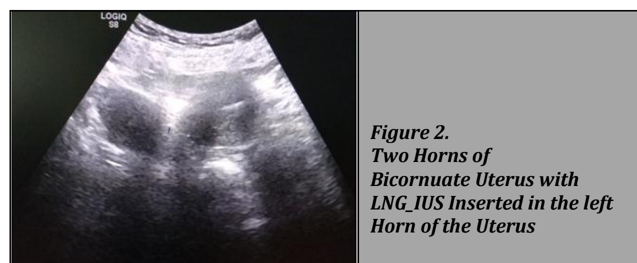

Figure 2. Two Horns of Bicornuate Uterus with LNG_IUS Inserted in the left Horn of the Uterus

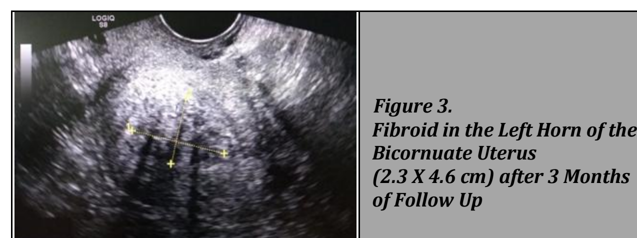

Figure 3. Fibroid in the Left Horn of the Bicornuate Uterus (2.3 X 4.6 cm) after 3 Months of Follow Up

TLC	4700 / µL
BUN	20 mg / dL
Creatinine	0.8 mg / dL
SGOT	69 U / L
SGPT	89 U / L
Platelets	110 x 10^3 / µL
Hemoglobin	9.8 g / dL
Alk. Phosphatase	67 IU / mL
Sodium	137 mEq / dL
Potassium	3.9 mEq / dL
Calcium	8.5 mg / dL
RBS	98 mg / dL

Table 1. Routine Investigations

DISCUSSION

Bicornuate uterus, also called as bicornis and unicollis is the most common congenital Mullerian anomaly and it demonstrates single vagina and cervix.[6] Along with this Mullerian anomaly, leiomyomas is a rare combination.[5-9] There have been very few reports of fibroids with bicornuate uterus and in majority of cases, woman presents with symptoms of pain in lower abdomen, dysmenorrhea or abnormal uterine bleeding (AUB) intermittently.[6,7] AUB has a significant impact on quality of life.[9] AUB and fibroids have a common relationship as they exist together hand in hand in majority of women.[10,11]

This patient also presented with left lower abdomen pain with dysmenorrhea and heavy menstrual bleeding and we on USG, bicornuate uterus with leiomyoma in left horn was detected. Both fibroids and bicornuate uterus leads to sub - fertility but, it was interesting to know that the patient had two successful full term child – births.[10] However, in women with uterine fibroids and AUB, everyday life and quality of life is affected and due to which fibroids remain a leading indication for hysterectomy.[12,13]

In young women with fibroid with AUB, uterine preservation approaches should be preferred as far as possible. An Endometrial aspiration was done to rule out the nature of the pathology and side by side, implanted the LNG - IUS was inserted with inj. Leuprolide acetate 3.75 mg intramuscularly. The woman was followed up and the results came out favourable. There is no displacement of LNG - IUS and the size of leiomyoma has reduced. It was managed avoiding surgery and in turn the quality of life of the patient drastically improved.

Hence, this case is being reported which was managed with LNG - IUS and recommended that hysterectomy and its further complications should be avoided wherever possible after proper patient selection.

CONCLUSIONS

The management rationale is to do conservative management where possible and prevent or reduce patient morbidity by avoiding surgical methods like laparotomy and laparoscopic surgeries, where ever we can, after proper patient selection.

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REFERENCES

[1] Rock JA, Johns HW. Telinde of operative gynaecology. Mullerian Abnormalities 2010;12:540-4.
[2] Nahum GG. Uterine anomalies. How common are they, and what is their distribution among subtypes? J Reprod Med 1998;43(10):877-87.
[3] Troiano RN, Mccarthy SM. Mullerian duct anomalies: imaging and clinical issues. Radiology 2004;233(1):19-34.
[4] Bafna B, Bafna A, Bafna A. Uterus bicornis unicollis with multiple lieomyomas. Int J Reprod Contracept Obstet Gynecol 2016;5(11):4088-90.
[5] Ly JQ. Rare bicornuate uterus with fibroid tumors: hysterosalpingography - MR imaging correlation. AJR Am J Roentgenol 2002;179(2):537-8.
[6] Eligar RC, Choukimath SM. Bicornuate [bicornis, unicollis] uterus, a congenital malformation associated with pathological lesions: a clinicopathological study of 4 rare cases. Journal of Evolution of Medical and Dental Sciences 2014;3(17):4608-14.
[7] Valvi D, Parulekar SV. Leiomyoma in a bicornuate uterus. JPGO 2014;1(3). http://www.jpgo.org/2014/03/leiomyoma-in-bicornuate-uterus.html
[8] Munitz HA. Case of the month: bicornuate uterus with presumed fibroids bilaterally. J Ultrasound Med 1983;2(12):R134-8.

[9] NICE. Clinical Guideline 44; Heavy menstrual bleeding 2007. National Institute for Health and Clinical Excellence http://www.nice.org.uk/nicemedia/pdf/CG44FullGuideline.pdf.
[10] Rani VRS, Thomas S. Leiomyoma, a major cause of abnormal uterine bleeding. Journal of Evolution of Medical and Dental Sciences 2013;2(16):2626-30.
[11] Munro MG, Critchley HOD, Fraser IS. The FIGO classification of causes of abnormal uterine bleeding in the reproductive years. Fertility and Sterility 2011;95(7):2204-8.
[12] Stewart EA. Uterine fibroids. Lancet 2001;357(9252):293-8.
[13] Merrill RM. Hysterectomy surveillance in the United States, 1997 through 2005. Med Sci Monit 2008;14(1):CR24-31.