



ANALYSIS OF HUGE POSTERIOR CERVICAL FIBROIDS IN GYNECOLOGICAL PATIENTS IN A TERTIARY CARE HOSPITAL: A RETROSPECTIVE STUDY

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ABSTRACT

Fibroids are frequently encountered, however posterior cervical fibroids are rare, especially of enormous size that are very rarely seen in modern era. These are usually associated with pressure symptoms on bladder, urethra, rectum or obstruction of ureters may be seen which leads to obstructive nephropathy necessitating its early removal. The aim and objective of this study was to find out the prevalence of cervical fibroid in hospital admission in tertiary care hospital and studying operative difficulties and outcome. Out of 182 cases of massive lump abdomen more or equal than 26 weeks gestation size 65 (35.71%) had huge leiomyoma, out of which 17 (26.67%) cases were of huge posterior cervical fibroids. Out of 17 cases four patients underwent myomectomy as 3 and 1 were unmarried and married respectively but nulligravida. A total abdominal hysterectomy was done in 6 patients and 7 were treated by TAH with bilateral salphingo oophorectomy (BSO). There was no case of any major injury to surrounding organs and no mortality. Blood transfusion was given in 13 patients out of which 10 patients required blood transfusion in intraoperative and post operative period. Difficulty in delivery was noted in 9 patients for which Parul's traction device was used. Conclusion- In cervical fibroid very often bladder is stretched and lifted even up to round ligament Caution should be taken while giving incision and parul's traction device is very useful in delivering compacted cervical fibroids. Adequate care should be taken to avoid injury to ureter(s).

KEYWORDS- Posterior cervical fibroid, Pelvic pressure symptoms, Parul's traction device.

INTRODUCTION

Fibroid is the most common benign tumor of uterus incidence being 20% at the age of 30.¹ Among all fibroids the incidence of cervical fibroids is 1-2% indicating that it is a rare entity.² Cervical fibroids depending upon its site can be anterior, posterior, lateral or central. Most common symptom of fibroid is asymptomatic though its commonest symptom is menorrhagia (30%), where as cervical fibroid generally presents with pressure symptoms depending on its site. Most of the anterior and central cervical fibroid present with bladder symptoms where as posterior wall fibroid with rectal symptoms. There kinking of ureter with hydro-uretero-nephrosis in lateral or huge cervical fibroid. As far as diagnosis is concerned, per rectal examination may clinch diagnosis of posterior cervical fibroids.³ Ultrasound is however, main diagnostic modality although CT MRI and doppler may also be used sometimes when the diagnosis is not clear. Sometimes the diagnostic dilemma if parity allows then most of the patient are hysterectomized.^{4,5} In case of cervical fibroids mainstay of treatment is myomectomy followed by hysterectomy but if infertility is the criteria then obviously myomectomy is preferred although the

restoration of the anatomy of uterus for objective of future reproduction remains the main concern. The main difficulty during the surgery of huge cervical fibroid is it's delivery for which various devices have been used, the most effective being Parul's traction device.⁶ The aim and objective of this study to find out the prevalence of huge posterior cervical fibroid in gynecological patients attending OPD in tertiary care hospital and studying operative difficulties and outcome.

MATERIAL AND METHODS

A retrospective study was conducted in the department of obstetrics and gynecology Himalayan Institute of Medical Sciences, Dehradun a tertiary care centre from April 2011 to March 2013. The available records for cases of huge cervical fibroids (size > or ≥ 24 wks size) that had been operated during the above period by the senior author were analyzed. Out of 182 cases of massive lump abdomen equal or more than 26 weeks gestation size, 65 (35.71%) had huge leiomyoma out of which 17 (26.67%) cases were of huge posterior cervical fibroids. Out of all gynecological cases during this period prevalence of posterior cervical fibroid was 0.056% or 5.6 per lac

gynecological patients. However, their incidence is high because of this hospital being tertiary care centre.

RESULT

Out of 182 case of massive lump abdomen 65 (35.7%) had leiomyoma of which 17(2.65%) cases were of posterior cervical fibroid. All were 26 weeks size of gestation or more. Out of all gynecological cases in OPD during this period, prevalence of posterior cervical fibroid was 0.056% or 5.6 per lac of gynecological patients. However, there number is high because of this hospital being referral centre. These 17 patients were analyzed, who had been diagnosed by USG as posterior cervical fibroid and confirmed intra-operatively.

Demographic profile: Most of the patient 11(64.7%) in our study group were from reproductive age group with the variation of youngest being 20 years and oldest of 55 years of age. There (17.6%) patients were unmarried, where as 14 (82.3%) were married among which two were nulligravida, 11 were multigravida, and only 1 was primipara (Table 1).

As far as clinical symptoms were concerned 9 (52.9%) of them presented with pressure symptoms among which 2 them presented with pressure symptoms among which 2 (11.7%) had bladder symptoms and bowel symptom each, pedal edema in 1 (5.8%), hydro-uretero-nephrosis was seen in 3 (17.6%) cases and rest of the 8 (47%) was patients had menstrual symptoms with majority of them presented with menorrhagia 7 (41.1%) in whom pre op blood transfusion was given and 3 (17.6%) had irregular menstrual bleeding (Table 2).

Associated diseases were also found in these patients. One (5.8%) patient was quiet obese, anemia was present in 3 (17.6%) which could be because of menorrhagia in whom pre-operatively blood transfusion was done. 2(11.7%) patient each had diabetes mellitus and hypertension, 3 (17.6%) patients presented with renal obstruction which could be because of pressure over ureter(s) by huge posterior cervical fibroid. One (5.8) patient had renal failure which was because of renal obstruction and hypothyroidism was present in 2 (11.7%) patients (Table 3). All patients were treated surgically,

where as the mode of surgery depended upon multiple factors like, age marital status, parity, difficulty in delivery of tumors and presence of adhesion. In 4 (23.5%) patients muomectomy was done 3 (17.64%) out of these were unmarried and one was married but nulligravida. There were 7 (41.17%) perimenopausal patients in whom total abdominal hysterectomy with bilateral salpingoopherectomy was done. In 1(5.8%) patient myomectomy followed by TAH with BSO (Table 4) was done because of size of cervical fibroid, as otherwise ureter would have been easily clamped. In rest of the 6 patient only TAH was done among which 1(5.8%) patient had myomectomy followed by TAH because of the above mentioned reason. One of the major difficulties in dealing with posterior cervical fibroid is its delivery. We faced this difficulty in 9 (52.9% out of 17) patients among for which we used Parul's traction device which was considered as a boon. Extensive adhesion was found in 4 (23.5%) patients and 1(5.8%) patient had necrosis in the substance of fibroid. Parul transfusion was given in 13 (76%). Preoperatively in 3(17.6%) cases and 10 (58.8%) cases intra-operatively and in post operative period. Difficulty in delivery was noted in 9 patients (52.9%) for whom Paul's traction method was used (Table 6).

Table:1 Distribution of Patients according to Age Marital status and Parity

AGE	No.	Percentage
<19	0	0
20-29	5	29.4
30-39	6	25.29
40-49	4	23.25
50-59	2	11.76
<60	0	0
Total	17	100
PARITY		
Unmarried	3	17.6
Married	14	82.3
• Nulligravida	2	11.7
• Primipara	1	5.8
• Multipara	11	64.7
Total	17	100%

Table: 2 Clinical presentation associated with cervical fibroid

Clinical Presentation	No.	Percentage
A symptomatic	0	0
Symptomatic	17	100
Pressure Symptoms	9	52.9
• Bladder symptom	2	11.7
• Bowel symptom	2	11.7
• Pedal and vulval edema	1	5.8
• Ureterohydronephrosis	3	17.6
• Pain in abdomen	1	5.8
Menstrual	8	47

symptoms		
• Menorrhagia *	7	41.1
• Irregular bleeding	1	5.8
• Amenorrhea	0	0
• Dysmenorrhea	0	0
Infertility	0	0
Total	17	100

* Pre op blood transfusion done in 7 cases.

Table: 3 Associated diseases with cervical fibroid

Associated diseases	No.	Percentage	Remarks
Obesity	1	5.8	–
Anemia	3	17.6	Pre op blood Transfusion given
Diabetes mellitus	2	11.7	–
Hypertension	2	11.7	–
Renal obstruction	3	17.6	
Hypothyroidism	2	11.7	
No complaints	3	17.6	–
Total	17	100	–

Table: 4 Treatment modalities

Type of treatment	No.	Percentage
A. Myomectomy	4	23.5
B. TAH	6	35.29
• Muomectomy followed by TAH	1	5.8
• Direct TAH	5	29.4
C. TAH with BSO	7	91.2
• Myomectomy followed by TAH with BSO	1	5.8
• Direct TAH with BSO	6	35.2
Total	17	100

Table: 5 Difficulties and Complication associated with surgery

Difficulty	No.	Percentage	Remarks
In delivery of Tumor/Uterus	9	52.9	Parul traction device was used
Extensive Adhesion	4	23.5	–
Necrosis	1	5.8	–
No difficulty	3	17.6	–
Complication			
Excessive haemorrhage	10	58.8	Intra op and post op blood transfusion given.
Bladder injury	1	5.8	Injury was repaired immediately
Ureteric injury	0	0	–
Rectal injury	0	0	–
Relaprotomy	0	0	–
Bleeding from pelvic bed	0	0	–

Table: 6 Requirement of blood transfusion (n=9)

Units of blood transfused	Pre- operatively	Intra – operatively/ Post- operatively	Total (Percentage)
No. (%)	3(17.6%)	10 (58.8%)	13 (76.4%)



Fig1. Diagrammatic representation of - Parul's traction used to deliver whole posterior cervical fibroid. Two or more device can be used.

DISCUSSION

The development of cervical fibroid occurs from the wall of cervix which account for 2- 5% of all fibroids.^[4-7] In our analysis of 65 cases of huge fibroids we found 17 (2.65%) cases of huge posterior cervical fibroids. They occur from either supravaginal of vaginal portion of cervix and are classified as anterior, posterior, lateral and central depending on their site of origin. Each fibroid presents differently, ant and central fibroid present with bladder symptoms, posterior with rectal symptoms and lateral mostly with hydro-uretero-nephrosis because of ureteric kinking.^[8] Most of our patient had either pressure symptoms 9 (52.9%) or menstrual symptoms 8 (47%) where as pressure symptoms were seen predominantly as the main complaint. Massive cervical fibroid may create multiple problems due to pressure symptoms. Changes over bladder are common, urethra and rectum though rare. Pressure over ureter(s) in the pelvis may cause hydro-uretero-nephrosis in one or both the sides. Usually right ureter is affected more often than the left ureter, which is protected due to pressure of sigmoid colon. However to achieve best result timely surgical intervention is required before permanent renal damage occurs.^[3]

In our study many patients were having associated comorbid diseases also, necessitating its treatment at pre operative period so as to deal with minimal pre operative and post operative complications. 3 (17.64%) of our 17 patients had anemia which was corrected in pre operative period by blood transfusion whereas 1 had renal failure and 3 had renal obstruction because of hydronephrosis. In 1 case of massive cervical fibroid, percutaneous nephrostomy was required but dramatic improvement was observed once obstruction was relieved by removal of tumor.^[9] Treatment of posterior cervical fibroid is either myomectomy or hysterectomy depending upon the age, parity, marital status. Out of seventeen cases 4 (23.5%) patients underwent myomectomy as three of them were unmarried and one

was nulligravida. In 6 (33.5%) patients TAH was done and 7 (41.2%) were treated by TAH with BSO. Basement et al also described that posterior cervical fibroid is treated by myomectomy or hysterectomy.^[10,11] Great surgical difficulties occur while operating on huge cervical fibroids by virtue of its relative inaccessibility and close proximity to bladder and ureter.^[11] Bladder in most of the cases is pulled up, ureteric distortion of its normal anatomy occurs therefore there are more chances of injury to ureter, bladder and uterine vessels as described by B. Kavitha and R. Jyoti.^[8] However in our cases minimal injuries were present because of skilled surgeon and his team and extreme precautions were taken to remain in the capsule of fibroid while doing surgery. Only one case had bladder injury which was repaired immediately. There were extensive adhesions in 4 (23.5%) patients and excessive hemorrhage present in 10 patients for which intra operative and postoperative blood transfusion was given. Unless availability of adequate blood is ensured these cases should not be operated. One of the greatest difficulty found in huge cervical fibroid is its delivery. We found this difficulty in 9 (52.9%) among 17 operated patients for which Parul's traction device was of great use. Huge ovarian tumors or uterine sarcomas especially massive cervical fibroid which fill whole of pelvic and abdominal cavity renders it difficult to apply clamps, dissect for hysterectomy or remove the tumor. Parul's traction device may be extremely useful to lift and bring out massive lump out of pelvis making the operative procedure a lot more easier^[6] (Fig. 1). The other main difficulty we faced while operating posterior cervical fibroid is inaccessibility of uterine artery. To overcome this problem vault to be opened after ligating first pedicle and then hysterectomy to be done in reverse manner as described by Boney.^[12]

CONCLUSION

Posterior cervical fibroid poses problems in form of pressure symptoms and operative difficulty to the

operating surgeon testing his surgical skill to the hilt. It is important to remember that if the dissection is in the capsule then most probably ureter remains safe. In our experience Parul traction device is extremely useful for the delivery of deeply impact posterior cervical fibroid.

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