

## Uterine Conserving Cervical Myomectomy in a Young Nulliparous Woman in Navy Reference Hospital Calabar, Nigeria

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### Abstract

Management of cervical fibroid which is one of the rare sites of uterine fibroid comes with challenges to gynaecologists especially in young nulliparous women where uterine conserving surgery is to be instituted. Cervical fibroid locations can be in the supravaginal or vaginal aspect of the cervix. It can also present as pedunculated fibroid or sessile fibroid from the cervical lip. The commonest presentations of cervical fibroid are pelvic pressure symptoms and menstrual irregularities. This is a case of a 24 year old nulliparous woman with recurrent pelvic pressure symptoms, heavy menstrual flow and vaginal discharge with diagnosis of cervical fibroid and vaginal fibroid polyp and was managed by uterine conserving surgery.

**Keywords:** Fibroid, Myomectomy, Cervix, Polyp, Pressure symptoms.

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### INTRODUCTION

Cervical fibroid with its associated complications are among the gynaecological burdens faced by women of reproductive age groups [1]. Its management especially in nulliparous young women desirous of pregnancy is saddled with challenges since the aim is to conserve the uterus. Some previous studies on cervical fibroid management enucleated the fibroid nodule before embarking on hysterectomy [2, 3] while another study conducted on cervical fibroid in pregnancy carried out abdominal delivery and subsequently did cervical myomectomy after breastfeeding [4]. The purpose of this report carried out in a low-resource setting is to create awareness that women with cervical fibroids can still conserve their uterus for reproductive reasons. In view of the paucity of case reports on this topic in Nigeria and none has been documented in Calabar, there is a need to report this to add to the body of evidence.

She was a 24 year old nulliparous woman who presented with recurrent heavy menstrual flow, abdominal swelling, lower abdominal pain, vaginal discharge and urinary frequency of six months duration. The prolonged and heavy menstrual flow of seven days

duration as opposed to her usual three days flow was associated with clot formation, dizziness and weakness. She used to be transfused with blood after each menses due to reduced blood volume. The abdominal swelling was gradual in onset and was associated with lower abdominal pain especially during menstruation. She also noticed recurrent yellowish foul-smelling vaginal discharge and urinary frequency. There was no vulval itching nor painful micturition. She has been on safe medication before she decided to seek medical attention.

She was stable on general examination however, abdominal examination revealed suprapubic fullness, lower abdominal tenderness, abdominopelvic mass about 18 weeks size, examining hands could not go below the mass and it was slightly mobile sideways. Bimanual examination showed vaginal polypoid mass attached by a stalk to a huge mass which was continuous through the external cervical os with the abdominal mass. The mass was felt as a bulge on the anterior wall of the rectum on rectal examination. A provisional diagnosis of cervical fibroid with vaginal fibroid poly was made and was confirmed by a pelvic ultrasonography which showed two huge submucous fibroid nodules. One of the nodules was located partly

in the submucosa of the posterior myometrium in the distal third of the corpus uteri and continued into the cervical canal. It measured 7.86cm x 7.09cm while the other nodule was in the submucosa of the posterior myometrium within the upper third of the corpus uteri measuring 6.42cm x 6.05cm. An intravenous urogram carried out to trace the course of the ureter showed a mass with pressure effect on the bladder and ureters that were laterally displaced. Pre-operative baseline investigations conducted were normal.

In view of the pressure symptoms, age and parity of the patient, the plan for myomectomy and polypectomy was decided by a team of specialists comprising gynaecologist, radiologist, urologist and anaesthetist. Consent was taken for hysterectomy in case of uncontrollable bleeding.

At the surgery a bulky uterus was exteriorized and the fallopian tubes and ovaries were grossly normal. The uterine tourniquet could not be applied due to the extension of the cervical fibroid inferiorly. A 100ml of 1:20 dilution of vasopressin was injected around the fibroid nodules. An incision was made on the uterus avoiding the cornual ends of the uterus to enucleate the submucous nodule within the upper third of the uterine body and endometrium was breached. Enucleation of the cervical fibroid nodule through the endometrial cavity was difficult due to its attachment to the vaginal fibroid polyp. The attention of a second gynaecologist was sorted who did vaginal fibroid polypectomy after patient was placed in lithotomy position. She was returned to dorsal position and with the aid of myoma screw applied on the superior aspect of the cervical fibroid nodule and gentle dissection around the fibroid the nodule was enucleated by the lead surgeon. A 2cm right lateral cervical tear was observed and was repaired using Vicryl 1. The endometrial cavity was repaired with the aid of 2-0 Vicryl while the uterine incision was repaired in two layers using Vicryl 2. Haemostasis was achieved, abdominal wall repaired in layers using appropriate sutures and the surgical wound was cleaned with antiseptics, dressed and covered. Intra-uterine catheter was inserted to prevent cervical and uterine adhesions. The specimen was sent for histopathology which confirmed benign leiomyoma.

She was commenced on post-operative medications and her clinical condition was uneventful. The urinary catheter was removed on the second post-operative day and she was discharged home on the sixth day after surgery. Counselling on the need to stay at least two years after surgery before conception was given to her and she was told to come for the removal of intra-uterine catheter ten days post-surgery which she complied. Next checkup visit was six weeks after surgery within which she has had her first post-operative menses which was normal flow and her clinical condition was stable.

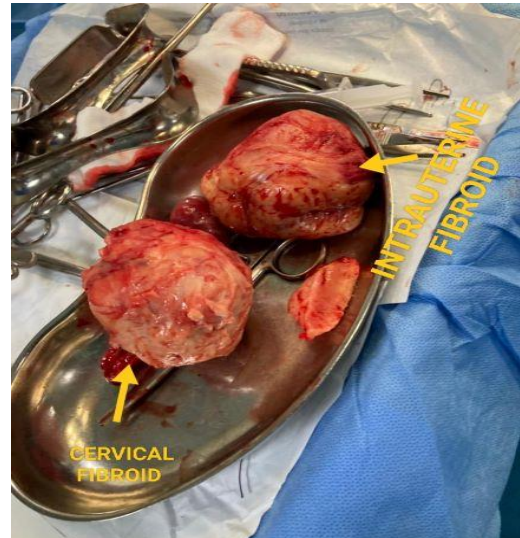


Figure 1: Fibroid nodules.

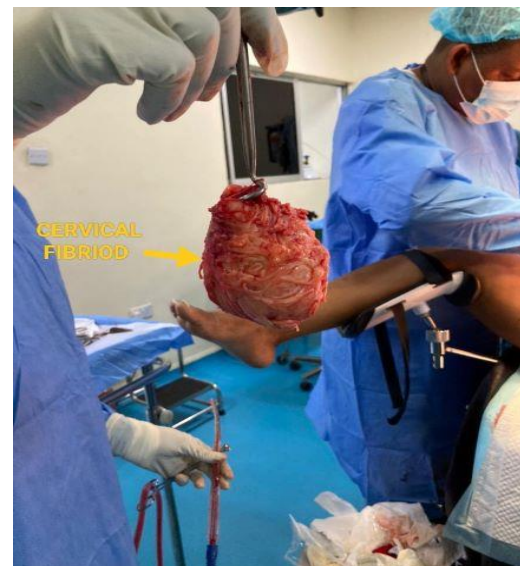


Figure 2: Cervical fibroid nodule.

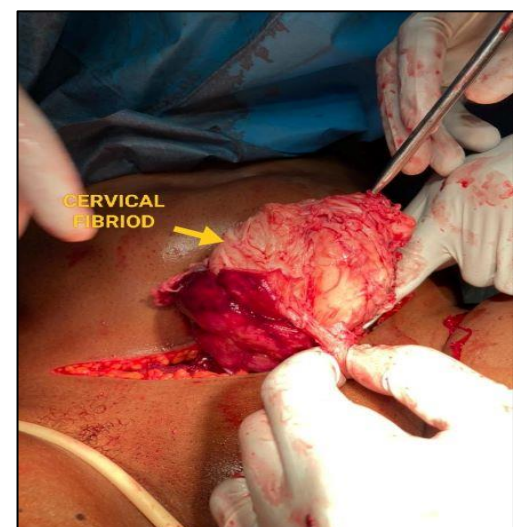


Figure 3: Enucleation of cervical fibroid nodule

## DISCUSSIONS

Uterine fibroids are among the commonest benign smooth muscle tumours in women with prevalent rate of (20 – 40) % in women above 35 years of age [1, 5]. The body of the uterus is the site for 95% of fibroids [6]. Cervical fibroid is one of the rare site of growth of uterine fibroid and the incidence has been reported to be (0.5 – 2) % [7]. The location of cervical fibroid can be in the supravaginal or vaginal aspect of the cervix and the supravaginal cervical fibroid could be centrally situated in the cervical canal [8]. Other modes of presentation of cervical fibroid can be as pedunculated fibroid which may arise from the endocervical canal or from the uterine cavity and protrudes into the cervix; or sessile cervical fibroid which originates from the cervical lip of the vaginal portion of the cervix [9-11]. The radiological diagnosis in our patient which was also confirmed by the intra-operative findings was supravaginal, vaginal and pedunculated cervical fibroid nodules. There was no sessile cervical fibroid in the index patient.

The commonest clinical presentations of cervical fibroid are menstrual irregularities and pelvic pressure symptoms [12]. These are as a result of the distortion of the endometrial and endocervical cavities as well as the increase in surface area which in turn results in heavy menstrual flow, intermenstrual bleeding and post coital bleeding. This patient presented with six months history of recurrent heavy menstrual flow. Enlargement of the cervix secondary to cervical fibroid exerts pressure on all the pelvic structures and it can induce lower abdominal pain. The pelvic structures mostly affected are the urinary bladder and the ureters resulting in stasis of urine, hydronephrosis and recurrent urinary tract infection. Most of these symptoms were evident in our patient such as recurrent lower abdominal and urinary frequency.

Treatment modalities for cervical fibroid include; surgical, medical, conservative and radiological interventions<sup>13</sup>. The management option to be instituted is dependent on the age of the woman, her parity, desire for pregnancy and her choice. The decision to carry out uterine conservative surgery on our index patient was because she was a young nulliparous woman who was highly desirous of conception. Surgical management of cervical fibroid which could be laparoscopic, open myomectomy or hysterectomy can be challenging and most be conducted by an experienced surgeon to avert morbidity and mortality [14]. Medical management of cervical fibroid involves the administration of GnRH analogues for three months before surgery to reduce the size of the fibroid and minimize intraoperative blood loss [15]. One of the radiological interventions for the treatment of cervical fibroid is uterine artery embolization.

## CONCLUSION

Management of cervical fibroid in a young nulliparous woman desirous of pregnancy is a surgical dilemma and is geared towards uterine conservation.

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