# Huge cervical fibroid

John Chukwuzitelu Ekweani, O. A. Oguntayo, A. O. D. Kolawale, M. S. Zayyan Department of Obstetrics and Gynaecology, Ahmadu Bello University Teaching Hospital, Zaria, Nigeria

**Abstract** Fibroids in the cervical region of the uterus are uncommon because of the rarity of smooth muscles. The aim of the study was to present this rare finding in our centre and to show our management and the challenges encountered. We present a 45-year-old multipara who before the presentation had 6-year history of abnormal vaginal bleeding and was previously managed in a peripheral hospital. Physical examination suggested a large cervical fibroid and a hydronephrosis on the right displayed on intravenous urogram. She had total abdominal hysterectomy with the urologist who repaired an inadvertent ureteric injury and inserted a stent. It was removed after 6 weeks, and she was discharged with no further complications. Management of such patients should involve other disciplines after careful evaluation has been carried out.

Keywords: Cervical, fibroid, huge

#### Address for correspondence:

Dr. John Chukwuzitelu Ekweani, Department of Obstetrics and Gynaecology, Ahmadu Bello University Teaching Hospital, Zaria, Nigeria. E-mail: johananie@yahoo.com Received: 20.09.2016, Accepted: 21.09.2016

### Introduction

The paucity of smooth muscles in the cervix uteri makes the incidence of leiomyomas in this region a rare finding in clinical practice.<sup>1</sup> The incidence is about  $1\%-2\%^2$ , and the uterine corpus leiomyoma/cervical leiomyoma ratio is about  $12:1.^1$  Tiltman<sup>2</sup> reported an incidence of 0.6% in the study of hysterectomy specimens.

Its growth depends on oestrogen-like fibroids located in the corpus, and hence its incidence is commoner among women in their reproductive age group making it less common in premenercheal and post-menopausal females.<sup>2-4</sup>

It is also commoner among Africans compared to their Caucasian counterparts.<sup>4</sup> Genetic contribution has been demonstrated.<sup>4</sup>

Cervical fibroids alter the shape of the cervix or may lengthen it. They may grow large enough to obstruct the cervical

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canal causing cryptomenorrhoea or may obstruct contiguous structures such as the ureters, bladder and rectum leading to urinary retention, increased frequency of micturition, feeling of incomplete voiding and constipation. It may also lead to menstrual abnormalities, dyspareunia and post-coital bleeding.

Imaging techniques such as ultrasound and intravenous urograms may demonstrate the cervical mass with or without calcifications and show back-pressure changes to the urinary system.<sup>1,4</sup>

Treatment options will be dictated by the presentation, patient's desires and the skills of the attending physician and can include resection which can be hysteroscopic or via open abdominal surgery, uterine artery embolisation/ ligation, abdominal myomectomy or hysterectomy. If large, the patient may benefit from GnRH analogues to shrink it and thereby making it operable. This will reduce the chances

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of damage to contiguous structures such as the ureters and urinary bladder.  $^{\!\!\!\!\!^{4.6}}$ 

The place of histology cannot be overemphasised as some other cervical masses can mimic it such as cervical polyps,<sup>7</sup> cancer and leiomyosarcomas. In the face of malignancy, such patients can still benefit from adjuvant cytotoxic chemotherapy.

#### **Case Report**

Mrs MZ, with hospital number 378902 was a 45 year old Hausa, Muslim, housewife. She was a Para 7+0, 2 alive woman whose last childbirth was 15 years ago. She was unsure of her last menstrual period but was said to be 2 months before presentation. She presented to the gynaecological clinic in January 2013 as a referral case from General Hospital, Funtua, Katsina state, with complaints of 6-year history of vaginal bleeding which was initially post-coital but later became spontaneous and irregular with no definite pattern. Bleeding was associated with clots, dizziness but no syncopal attacks. She had blood transfused in the referral hospital on one occasion. There was also malodorous, itchy vaginal discharge. There was dysuria, increased frequency of micturition and had urinary retention on three occasions necessitating urethral catheterisation which relieved it. The last catheterisation was 3 days before presentation. She did not have constipation or painful defecation. There was no feeling of incomplete defecation.

She attained menarche at I3 years of age and had menstrual flow of 3–4 days in a regular 28-day cycle. She was not aware of Papanicolaou smear and has not had any.

Her pregnancies were supervised and carried to term, but all her deliveries were at home except the first which was in the hospital with the outcome of early neonatal death following birth asphyxia. Four of her children died following brief febrile illnesses in their 1<sup>st</sup> year of life. The other two children are still alive and well.

She was not a known hypertensive, diabetic, asthmatic or sickle cell disease patient. She had no previous abdominal surgery.

She was the first of two wives in a non-consanguineous family setting. There was no family history of fibroids. She neither smoked cigarettes nor drank alcoholic beverages.

Physical examination showed a middle-aged woman who was not pale, anicteric, acyanosed, had no pedal oedema and was afebrile with axillary temperature of 37.1°C.

Her pulse rate was 78 per minute, full volume, regular and synchronous with other peripheral pulses. Her blood pressure was 110/70 mmHg in sitting position. The chest was clinically clear.

The abdomen was full and moved with respiration with a suprapubic accentuation. There was no area of tenderness. The liver, spleen and both kidneys were not palpably enlarged. There was no demonstrable ascites and the bowel sounds were present and normoactive.

Pelvic examination showed a normal vulva and vagina. The cervix was flush and taken up by a smooth mass which involved the whole cervix but more in the posterior aspect. It was firm-hard in consistency and mobile. The mass extended to the fornices and pouch of Douglas. The uterus was 21 weeks size and moved with the cervical mass.

Digital rectal examination showed a clean anal verge with normal sphincteric tone. The examining gloved finger felt the same mass protruding into the anterior rectal wall, but the rectal mucosa was preserved. The examining finger was soiled with well-formed stool.

An impression of a huge cervical myoma was made to rule out coexisting uterine fibroids.

Her packed cell volume was 42%. The urea, electrolytes, creatinine and blood glucose were within normal limits. Her retroviral screen was non-reactive.

Abdominopelvic ultrasound scan done at presentation showed normal kidneys and urinary bladder. The uterus was anteverted and bulky. The myometrium contained a spherical and hypoechoic mass located in the lower region/cervix measuring  $8.5 \text{ cm} \times 6.9 \text{ cm}$ . The ovaries were not visualised. The impression was that of a huge cervical fibroid [Figure I].

The intravenous urogram showed a distorted, elongated urinary bladder. There were right hydronephrosis and hydroureter secondary to a huge fibroid located in the lower uterus.



Figure 1: Sonoprint of cervical myoma

She had a Papanicolaou smear cytology and cervical punch biopsy histology both of which showed severe dysplasia [Figure 2].

She was counselled for a total abdominal hysterectomy which she consented to. Due to financial constraints, she did not receive prescribed gonadotropin-releasing hormone analogue.

The intraoperative findings at surgery were moderate adhesions in the pelvis, more on the posterior uterine wall and left adnexae. Both fallopian tubes and ovaries were grossly normal. The corpus uteri were grossly normal with a cervical fibroid measuring 20 cm  $\times$  13 cm with degenerative changes. Ureteric injury was encountered on the right at the level of the pelvic brim. The ureteric injury was repaired by a urologist using a double 'J' stent. The estimated blood loss was 600 ml [Figures 3 and 4].

She had a good post-operative course and was discharged a week later with a packed cell volume of 35%. The double 'J' stent was eventually removed through cystoscopy 6 weeks later.

The histopathological findings were consistent with that of leiomyoma of the cervix uteri.

#### Discussion

The case under review was the only case of huge cervical leiomyoma reported in the last 8 years in our centre, indicating the rarity of this condition.<sup>1,2,4</sup> The presence of isolated leiomyoma of the cervix in the presence of an apparently normal uterus is uncommon.<sup>2</sup>

Their incidence increases with age in women in the reproductive age group as seen in the index case.<sup>4</sup> This is due to their dependence on the hormone oestrogen.

It presented with intermittent urinary retention relieved by catheterisation as seen in this case due to its large size and proximity to the urinary bladder and urethra.

The treatment in this case was total abdominal hysterectomy and the ureter on the right was accidentally transected due to its proximity to the mass, extensive fibrosis and the large size of the fibroid as found intraoperatively. The management involved the contribution from other specialities such as the urologist and histopathologist. This was made possible because she presented to a tertiary facility such as ours. It is recalled that she was referred from a secondary level health facility where the management of this would have been more challenging. At presentation, full evaluation is the key as the need to need to



Figure 2: Intravenous urogram showing right hydronephrosis and hydroureter



Figure 3: A view of the hysterectomy specimen



Figure 4: Another view of the hysterectomy specimen

involve other specialities was quickly recognised and addressed. This benefitted the index patient immensely.

This may have been prevented if the fibroid was shrunk before surgery using GnRH analogues such as Goserelin which was prescribed for this patient but she could not afford it, though this may have delayed tissue diagnosis.<sup>6</sup>

Early presentation of cases as it needs to be emphasised as late life-threatening complications would have ensued such a renal failure, systemic hypertension and other sequelae.

#### Conclusion

The management of this rare condition should be individualised and multidisciplinary involving specialities such as urologist, histopathologist, radiologist and general surgeon.

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## **Conflicts of interest**

There are no conflicts of interest.

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