

## **ARE UTERINE FIBROIDS STILL SYMPTOMATIC AFTER MENOPAUSE? A CASE REPORT OF A 58 YEAR OLD P4<sup>+</sup>, 5 YEARS POSTMENOPAUSAL WOMAN WITH HUGE SYMPTOMATIC UTERINE LEIOMYOMA IN LAGOS, SOUTH WEST, NIGERIA**

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### **ABSTRACT:**

We report a case of huge symptomatic uterine leiomyoma in an obese 58 year old, P4<sup>+</sup>, 5 years postmenopausal woman. She presented with progressive abdominal swelling, weight loss and postmenopausal bleeding. These made us suspect intra-abdominal malignancy, however investigations showed features of benign tumour. She had exploratory laparotomy, total abdominal hysterectomy and bilateral salpingo-oophorectomy. Findings at surgery were consistent with benign abdominopelvic mass. Histological investigation, showed uterine leiomyoma.

Huge symptomatic uterine leiomyoma is a rare occurrence after menopause. Its size at presentation also made definitive diagnosis a dilemma because of the possibility of intra-abdominal malignancy.

**Keywords:** Postmenopausal, Uterine Leiomyoma, Hysterectomy, Havana Specialist Hospital Limited.

### **INTRODUCTION:**

Uterine leiomyomas are benign smooth muscle tumours of the uterus and the commonest benign tumours seen in women during the reproductive age.

<sup>1,2,3</sup> It is more common among women of African descent and are oestrogen and progesterone dependent tumours, thus they regress significantly after menopause. <sup>2,3,4</sup> They are therefore usually rare and asymptomatic after menopause. <sup>2,3,4,5</sup>

Therefore, presentation with huge uterine leiomyoma with postmenopausal bleeding and weight loss requires a critical evaluation and urgent management.

This paper reports a rare case of huge uterine leiomyoma, with postmenopausal bleeding and weight loss in a 5 year post-menopausal woman. She had Exploratory Laparotomy and Bilateral Salpingo-

Oophorectomy.

### **CASE REPORT:**

This 58 year old P4<sup>+</sup>, 5 year postmenopausal widow, presented with 6 year history of abdominal swelling, a year history of weight loss, urinary frequency and urgency, and the passage of serosanguinous fluid per vaginam.

She had regular menstruation until 5 years prior to presentation. She had 4 vaginal deliveries between 1980 and 1989. She attained menarche at the age of

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14 years and used combined oral contraceptive pills for 6 years after her last delivery, but she was not sexually active at the time of presentation. She was a known hypertensive diagnosed 2 years before presentation and had been on Tab Amlodopine 10mg daily and Tab Aldomet 500mg twice daily with good compliance. She had no history of previous surgical operation.

On examination, she was obese, mildly pale, afebrile and anicteric. There was no peripheral lymphadenopathy. Her body weight and height were 110kg and 1.61metres respectively, giving a body mass index of  $42.44\text{kg}/\text{m}^2$ . Her blood pressure was 140/100mmHg and only the first and the second heart sounds were heard on auscultation.

Abdomino-pelvic ultrasonography showed multiple calcified uterine myoma. We made a provisional diagnosis of huge Uterine leiomyoma in a post-menopausal woman to rule out uterine malignancy. In view of her age and the above symptoms, the following investigations were carried out to make a definitive diagnosis and to prepare her for Exploratory laparotomy. Her packed cell volume was 32%, total white blood cell count was  $5.0 \times 10^9$  /liter, retroviral screening was negative, her liver function tests, electrolytes, urea and creatinine, fasting blood sugar and 2 hours post-prandial glucose were normal. Her platelet count was  $263,000/\text{mm}^3$ . The Electrocardiography (ECG) showed sinus tachycardia and was reviewed by a cardiologist. Her Computerized Tomography scan (CT scan) of the abdomen and the pelvis showed symptomatic massive pedunculated uterine leiomyoma to rule out leiomyosarcoma. Endometrial biopsy and cervical tissue were sent for histopathological assessment. The findings were: normal ectocervical tissues, the endocervical cells revealed atypical squamous cells of undetermined significance (ASCUS), but the endometrial biopsy was said to be insufficient for histopathological

assessment.

She consented to Exploratory laparotomy, total abdominal hysterectomy and bilateral salpingo-oophorectomy under general anesthesia using a midline abdominal incision. The findings at surgery were: huge uterus with multiple leiomyomas; submucous, subserous and intramural and weighed 4.8 kg. Pedunculated fundal leiomyoma measuring  $14 \times 12\text{cm}$ , atrophic ovaries bilaterally, dilated tortuous blood vessels on the uterus, mostly on the leiomyomas. There were no peritoneal seedlings and no ascites. The liver, the kidneys, the bladder and the guts were grossly normal (See the figure below). The estimated blood loss was 750 ml.

She had intra-operative intravenous Ceftriaxone 1g and Metronidazole 500mg. These were continued until 48 hours after surgery. Her post-operation packed cell volume was 23% on the second post-operative day. She was transfused with 2 pints of blood and the post-transfusion packed cell volume was 27%. The post-operative condition was uneventful. She was discharged home by the fourth post-operation day on oral antibiotics, analgesic and haematinics excluding folic acid.

Her clinical condition was satisfactory at the follow-up Clinic visits (2 and 6 weeks after surgery), her packed cell volume was 30% and the histology report revealed multiple uterine leiomyomata with no evidence of malignancy. The details of the surgery and the histology reports were explained to her

## **DISCUSSION**

Uterine leiomyomata are benign smooth muscle tumours of the uterus, found commonly in women of the reproductive age and predominantly in women of African descent.<sup>1,2,3</sup> Uterine leiomyomata regress after menopause.<sup>2,3,4,7</sup> It constitutes about 20-30% of the gynaecological cases managed in most tertiary health care facilities. The incidence and the clinical manifestations increase with the age of the women

and reduced with increased parity.<sup>7,8,9</sup> The wide disparity of the incidence is due to the fact that many of the women are asymptomatic, have poor knowledge or misconception about the disease and so do not present in the hospital for the appropriate and timely management.<sup>10</sup>

The exact cause of uterine leiomyoma is not clearly understood, but some associated risk factors include; racial especially african-american origin, obesity, family history especially first degree relatives, nulliparity and reproductive age because they are oestrogen and progesterone dependent for their growth.<sup>11,12,13</sup> In this case, the patient was P4<sup>+0</sup>, morbidly obese with body mass index (BMI) of 42.44kg/m<sup>2</sup> and had a uterine mass that weighed 4.8kg. She was a post-menopausal woman with no family history of uterine leiomyoma. Interestingly, some authors have reported cases of leiomyoma in post-menopausal women.<sup>7,14,15,16,17</sup> The authors suggested different mechanisms other than oestrogen and progesterone during the reproductive age. These includes; the stimulation effects of insulin-like growth factors (IGF), epidermal growth factors (EGF), polypeptides growth factors such as platelet derived growth factors (PDGF), transforming growth factors, granulocyte-macrophage colony-stimulating factors and vascular endothelial growth factors (VEGF). Similarly in the obese post-menopausal women, peripheral conversion of androstenedione derived from the adrenal glands to oestrone by aromatization of fat has been suggested for the stimulation of growth of leiomyomas in this group of women.<sup>16,17</sup> Thus our reported case might have received stimulation from the growth factors and the aromatization of the peripheral fat to oestrone because of her morbid obesity (BMI: 42.44kg/m<sup>2</sup>). These, possibly was responsible for the huge size of the leiomyoma.

Detailed history, astitute clinical examination and radiological investigations such as abdomino-pelvic

ultrasonography and/or magnetic resonance imaging (MRI) are invaluable tools to make a definitive diagnosis. Unfortunately these imaging techniques can not clearly distinguish between benign and malignant leiomyoma (leiomyosarcoma), although malignant transformation is rare with an incidence of 0.1-0.6%.<sup>3,8</sup> However, rapid growth, unexpected growth such as huge leiomyoma after menopause or peripheral lymphadenopathy may raise suspicion of malignant transformation. This was a big challenge in this case, with abdominal pelvic mass of 36 weeks size and weight loss after menopause. We therefore requested for computerized tomography scan (CT scan) of the abdomen and the pelvis, endometrial biopsy and Pap smear.

Degenerative changes result, when uterine leiomyoma has outgrown their blood supply. The commonest degenerative change is hyaline degeneration.<sup>7,17</sup> Others are; calcification, cystic, fatty changes myxomatous changes and red degeneration which occurs during pregnancy. Calcification is common after menopause. In this case the abdomino-pelvic ultrasonography and the CT scan of the abdomen and the pelvis showed features of cystic and calcific changes.

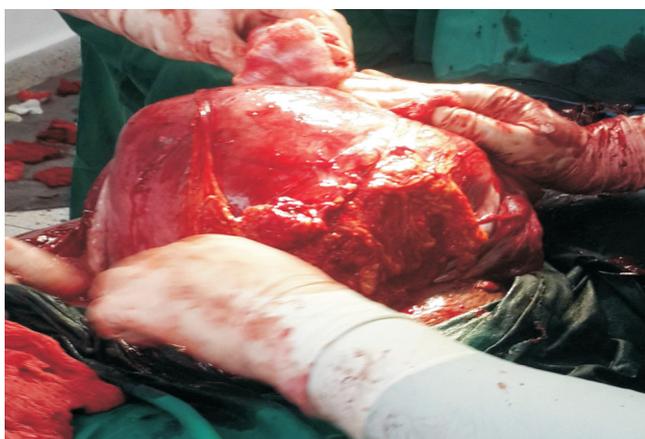
Most cases of uterine leiomyoma does not require treatment when they are asymptomatic, either during the reproductive age or after menopause. However in those symptomatic cases, management involves medication to control symptoms or to shrink the tumours, surgical interventions such as myomectomy, abdominal or laparoscopic hysterectomy depending on the age, and the parity of the patients.<sup>2,3,4</sup> Other minimally invasive radiological or surgical interventions includes, uterine artery embolization, bilateral uterine artery ligation and radio frequency ablation.<sup>3,4,19</sup> In this case, the patient was P4<sup>+0</sup>, 5 years post-menopausal woman, with huge symptomatic uterine leiomyoma and there was no feature of disseminated malignancy.

We therefore counseled her for total abdominal hysterectomy and bilateral salpingo-oophorectomy, to prevent future malignant transformation, since the ovaries were not expected to be functional after menopause

## CONCLUSION

Uterine leiomyomas are rare after menopause and are usually asymptomatic, because they are expected to shrink after menopause. This reported case, showed that uterine leiomyomas can be huge in size and symptomatic after menopause without malignant transformation. However, the presentation with post-menopausal bleeding as seen in this patient requires adequate investigations to exclude disseminated gynaecological or intra-abdominal malignancy before embarking on surgical intervention.

FIGURE 1: HUGE UTERINE MASS AND ITS TUBES WITH PERITONEAL ADHESIONS



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