

An unusually large uterine fibroid: A case report of nulliparous with giant uterine fibroid removed 8 years after it was noticed

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ABSTRACT: The case is that of a 40 year old nulliparous who presented with progressive abdominal swelling, bilateral leg swelling, easy fullness and weight loss. She was married but husband had abandoned her because of this problem. Abdomen was massively distended without clinical signs of ascites. Ultrasound scan revealed abdominopelvic mass with features of uterine fibroid with pressure effects on the urinary tract. She had myomectomy done at which an unusually massive uterine fibroid in adhesions with anterior abdominal wall and the liver was found. She had prolonged daily peritoneal fluid effluent in excess of 300 mls for about 2 weeks which was managed. Histology of specimen revealed uterine leiomyoma. Late presentation for uterine fibroid is common in this part of the world, however this incident case that weighted 15 kg and involved in adhesion with the liver is not common. It is advisable for patients with uterine fibroid to present early for treatment to achieve better outcome. It is also suggested for the gynecologist to counsel and peruse such cases at initial stages so to prevent adverse outcomes.

Keywords: Abdominal distension, giant uterine fibroid, myomectomy, post-operative ascites.

INTRODUCTION

Uterine fibroid is a benign tumour of the uterine smooth muscles and is a common occurrence amongst women of reproductive age group. They are more common in Africans and the black race and even present late and in bigger sizes. Distorted and inaccurate health information among the populace may contribute to late presentation when complication would have set in or the fibroid becomes huge (Adegbesan-Omilabu et al., 2014). The actual cause of uterine fibroid is not known but there are theories of certain predisposing factors that includes prolonged exposure of the uterus to estrogen as in elderly nulliparity, genetic predilections because it could run in family, high body weight which is associated with high

peripheral estrogen production and reproductive-age women of African or African-American origin (Drinville and Memarzadeh, 2007). Uterine fibroid occurs in about 70% of women (Stewart et al., 2017). Women with uterine fibroid usually present with abdominal swelling, excessive bleeding during menstruation, abdominal pains, inability to conceive. Uterine fibroid are almost always non-cancerous. Office of Women's Health quotes incidence of cancerous fibroids to be 1:1,000. Investigations commonly carried out upon suspicion of uterine fibroid include ultrasound scan which shows location of the mass, packed cell volume to assess the patients blood level and other ancillary investigations like serology, urinalysis, renal

function test and blood grouping/cross matching.

While hysterectomy is the definitive and curative treatment for uterine fibroid, patients that still desire child birth are often offered myomectomy despite the known possibility of reoccurrence. This work has been reported in line with the surgical case report (SCARE) criteria (Agha et al., 2018).

CASE REPORT

Patient was a 40 year old Nigerian evangelist. She is nullipara who presented at a private hospital, Gloryland-Consultants Specialist Clinic, Akure during a statewide doctors strike of March 2021 with 8 years history of progressive abdominal swelling, 1 year history of progressive weight loss, leg swelling with varicosity and increased frequency of micturition. She had resorted to prayers and use of herbs but not getting expected results necessitating presentation.

Swelling was first noticed in the suprapubic area but has progressed to take over the entire abdomen, there was occasional pains. She noticed progressive weight loss over past 1 year with significant reduction in her eating habit and quantity until the time of presentation when she was unable to eat even tennis ball size food. No associated menorrhagia. No history of cough. She has been having leg swelling for about 1 year with associated tortous swellings in the posterior part of right leg. Her frequency of micturition has increased from initial 1 to 2 per day to 3 to 4 per day but with significant reduction in quantity pass per time. No dysuria. No family history of such presentation.

She got married 8 years ago but husband left her 4 years ago because of her disease. She attained menarche at age 13 and menstruates for 4 to 5 days every 28 days. Does not use contraceptives but not sexually active at time of presentation. She was not a known hypertensive, diabetic, asthmatic or sickle cell disease patient. No history of past surgery. She gave history of doing a scan in 2013 (8 years) on account of inability to conceive and revealed uterine fibroid

On examination at presentation, she was chronically ill looking, prominent zygomatic bones. She was not pale, anicteric and not dehydrated. Pulsed rate = 78 b/m, blood pressure = 120/90 mmHg, respiratory rate = 19 c/m, weight = 62 kg and temperature = 37°C. Chest was clear clinically. Abdomen was distended, moves with respiration, not tender. Abdominopelvic mass covering the entire abdomen up to the xyphisternum precluding the examination of the kidneys and the liver. Vaginal examination revealed normal vulva, cervix. Ultrasound scan revealed a huge abdominopelvic mass of uterine origin with multiple hypo/hyper echogenic areas and back pressure features. An assessment of huge uterine fibroid with pressure symptoms was made.

She consented to myomectomy under general anaesthesia using midline incision. An additional consent

for hysterectomy in case of uncontrollable hemorrhage at surgery was also taken. The following investigations were done.

PCV = 34%

Urinalysis = normal

Random blood Sugar = 6 mmol/l

HbSAg = Negative

RVS= Negative

Blood group = O+

Genotype = AA

EUCr = Urea 28 References (10-55mg/dl)

= Creatinine 0.5 References (0.6-1.1mg/dl)

= Sodium 136 References (133-155mEq/l)

= Potassium 3.6 References (3.5-5.5mEq/l)

=Chloride 104 References (96-100mEq/l)

= Bicarbonate 29 References (21-30mEq/l)

Grouping and cross matching of 4 units of O+ blood was done.

She had abdominal myomectomy done under general anaesthesia with endotracheal intubation. A midline incision was used to access peritoneal cavity and about 17 fibroid nodules were removed. The largest, pedunculated on the fundal area was about 40 cm x 30 cm. Others were of various sizes ranging from 15 cm x 12 cm to 5 cm x 5 cm in fundal, body and isthmic areas of the uterus and either subserosal or intramural. None was submucous and therefore the endometrium was not breached. There were dilated tortous blood vessels on the largest leiomyoma which was also in adhesions with the inferior surface of the liver. The mass was detached from the liver and haemostasis was secured. Ovaries were normal. The kidney, bladder and guts were grossly normal. A peritoneal drain was inserted. Estimated blood loss was 2.5 litres and she had 4 units of blood transfused intra-operatively and 10 mls of calcium gluconate after fourth pint of blood. She had intravenous Ceftriazone 1 g and Metronidazole 500 mg intra-op which were continued for 72 hours. She was then placed on oral antibiotics and analgesics following return of bowel sounds. The post transfusion PCV was 17% and she had 3 more units of blood transfused. Peritoneal drain remained active for about 2 weeks after operation draining bloody effluent for the first 3 days, serosanguinous for about 1 week and serous for another 1 week but in excess of 300 mls daily. Assessment of post operative ascites was made and was placed on Tabs Aldactone 50 mg daily, Tabs frusemide 20 mg daily. Drain was then discontinued when effluent reduced to 100 mls per day and patient was discharged home to continue on the drugs for 1 week. She was seen 3 weeks after operation at which wound was well healed drain site has closed and there was no abdominal distension. Packed cell volume (PCV) was 32% and histology of specimen revealed 17 fibroid masses weighing 15 Kg altogether. There was no evidence of malignancy. These details (intra-operative findings) were made known to the patient.



Plate 1. Photographs of fibroid at surgery during removal (myomectomy).

DISCUSSION

This case report revealed an unusual huge uterine fibroid which weighed 15 kg (Plates 1 and 2), of which she had a successful abdominal myomectomy. Uterine fibroid size can vary from less than an inch to larger than a grapefruit and even larger. Fibroid is regarded to be small if it is 1 to 5 cm in size, medium if 5 to 10 cm in size and large if >10 cm in size. A fibroid is considered giant if it weighs 25 pounds (11.3 kg) or more (Bora et al., 2017). Giant fibroids are exceedingly rare (Lim et al., 2018) as less than hundreds of such have been documented worldwide up till 2018 (Kalyan and Sharma, 2018). The size of the fibroid in this case was 15 kg (33.07 pounds) and therefore can be considered a 'giant' fibroid. The largest fibroid in the world weighed a record 140 pounds (63.5kg) and was removed from a woman postmortem in 1888 (Nierenberg, 2018). Amongst patients who survived the largest ever removed



Plate 2. Photograph of patient at surgery immediately after fibroid removal.

was 100 pounds (45.5kg). Also doctors in Singapore successfully removed a so called giant fibroid weighing about 61 pounds (28 kg) from a 53 year old woman who had already become bedridden from the weight of the fibroid and having some shortness of breath. In Nigeria, the largest uterine fibroid ever removed and published was 14.5 kg (Nnaji et al., 2020). The fibroid in this case was reported by histopathologist to weigh 15 kg and therefore the heaviest fibroid removed in Nigeria so far. After rigorous literature search, it was discovered that no any giant fibroid has been reported in Ondo state of Nigeria where the index case was removed. If fibroid is larger than 12 to 14 weeks pregnancy size (about the size of a large grape fruit), the risk of complications during surgery such as injury to the ureter or bladder increases.

This patient presented with abdominal swelling, easy fullness, cachexia (substantial loss of muscle mass) but no menorrhagia which is a common presentation in fibroid. This may be due to non location of any of the fibroid in the submucous area of the uterus which usually increases endometrial surface area. Hysterectomy is the curative treatment for uterine fibroid (Ezeama et al., 2012) but open myomectomy was chosen as mode of management for this patient because of the size, she is nullipara and desires pregnancy. Other modalities of management of uterine fibroid include laparoscopic myomectomy which is not applicable in this case.

Only few incidences of ascites following operation for

benign disease have been reported (Kostov et al., 2019). The excessive peritoneal fluid secretion noticed in this case may be due to adhesions with the liver from which the mass was separated. Acute ascites has been found to develop in severely injured patients but its pathophysiology is poorly understood. Eldor and colleagues (Eldor et al., 1991) documented ascites in a 12 years old girl following bilateral femur fracture fixation during which 15 l of crystalloid was used for resuscitation. Markert et al. (1997) also had reported 3 cases of sub capsular liver haematoma causing hepatic outflow obstruction and subsequent ascites. There has been reports of acute ascites in patients that had abdominal decompression surgery due to abdominal compartment syndrome (ACS) in the literature. In review of the literature, no similar case has been reported. The ascitic fluid production in this patient reduced significantly following limitation of salt intake and administration of aldactone and frusemide.

Conclusion

The incidence of giant fibroids is rare in the world. The aggregate size removed in index case is unprecedented in Nigeria. Operation of uterine fibroid when it has become giant can be quite challenging associated with risks of adhesions, increased blood loss and transfusion, prolonged hospital stay, increased morbidity and unusual post operative occurrences as seen in this case. Therefore, it is advisable for uterine fibroid to present early for treatment to achieve better outcome. It is also suggested for the gynecologist to counsel and peruse such cases at initial stages so to prevent adverse outcomes

CONFLICT OF INTEREST

No conflict of interest whatsoever on the part of all the authors.

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