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(CASE REPORT)

Large umbilical hernia complicating huge uterine fibroid: Case report in a tertiary hospital in Port Harcourt, Nigeria

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Abstract

Background: Leiomyoma, also known as uterine fibroid is a benign tumour of the uterus. The size varies from a pin-head to a massive swelling occupying the whole of the abdominal cavity, depending on its site and duration. Huge uterine fibroid coexisting with umbilical hernia have been reported in the global literature. The aim of this report was to highlight a rare presentation of huge uterine fibroid with a large umbilical hernia, as well as the management and achievement of successful outcome, in a tertiary hospital in Port Harcourt, Nigeria.

Case Presentation: A 43-year-old nulliparous woman who presented to the Emergency Department with features of intestinal obstruction, complicating a large umbilical hernia coexisting with a longstanding huge uterine fibroid. She had myomectomy and herniorrhaphy done, and the post-operative period was uneventful.

Conclusion: This report not only showcases the unusual presentation of huge uterine fibroid with large umbilical hernia, but also highlight a picture of neglected surgical conditions in our practice. Action is needed from the political, administrative and professional personnel to forestall such occurrences among patients in our sub-region.

Keywords: Large Umbilical Hernia; Huge Uterine Fibroid; RSUTH; Port Harcourt; Nigeria.

1. Introduction

Leiomyoma, also known as uterine fibroid is a benign tumour of the uterus. The size varies from a pin-head to a massive swelling occupying the whole of the abdominal cavity, depending on its site and duration. It usually presents in women of child-bearing age. Leiomyoma are the most common tumour of the uterus. Blacks and African women are more likely to have fibroids than any other race[1, 5,6] and the prevalence in Nigerian women is 33.9%[1]. With increasing size of the fibroid, distension, stretching, weakness of the anterior abdominal wall muscles and fascia results. The developmental origin, pathogenesis, and treatment of uterine fibroid have been well studied and reported [2-7]. Medical, surgical, and radiologically guided interventions are known options for the treatment of symptomatic uterine fibroids, and the Gonadotrophin releasing hormone agonists (GRH) and selective progesterone receptor modulators (SPRMs) are reported to show good promise out of the available medical alternatives[8].

Huge uterine fibroid coexisting with umbilical hernia have been reported in the global literature. In year 2005, uterine fibroid presenting as incarcerated umbilical hernia in a 30-year-old pregnant woman in the United Kingdom[9]. A case of huge uterine fibroid occurring with a pedunculated component in an umbilical hernia in a 66year old female was

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reported in Korea in 2017[10]. There was also a similar report of incarcerated giant uterine leiomyoma within an incisional hernia in 56-year-old nulliparous woman[11]. Full-term pregnancy was reported in umbilical hernia in Africa[12]. and in India: a triad of ventral hernia, cholelithiasis and uterine fibroid in females and ventral hernia, cholelithiasis and benign prostatic hypertrophy in males have been documented[13].

In Nigeria, massive ascites complicating huge uterine fibroid[14], large uterine fibroid in pregnancy with successful Caesarean section[15], incarceration of sessile uterine fibroid in incisional hernia[16], and successful pregnancy after surgery for giant uterine fibroid have all been reported[17]. Huge uterine fibroid mimicking feature of malignancy was reported in 2021 in Port Harcourt[18], but we have not seen a co-existence of uterine fibroid with a large umbilical hernia in our practice hence this documentation. The aim of this report therefore, was to highlight a rare presentation of an unusually huge uterine fibroid co-existing with a large multi loculated umbilical hernia seen in a tertiary healthcare facility in Port Harcourt.

2. Case Presentation

2.1. Clinical History

A 43-year-old nulliparous woman presented at the Accident and Emergency Department of the Hospital (Rivers State University Teaching Hospital) with complaints of abdominal swelling of 7-years duration, umbilical swelling of 8-months, and one-day history of abdominal pain around the umbilicus. The umbilical swelling bulges and regresses, and was associated with episodes of abdominal pain, nausea, vomiting, and constipation. She had declined offer of myomectomy for huge uterine fibroid a year ago at a peripheral centre. There was no other risk factor for raised intra-abdominal pressure. Her last menstrual period was on the 13th October 2022. It lasted for five days, and there was no irregularity in menstrual cycle. She was not diabetic, but a known hypertensive patient on medication.

2.2. Clinical Examination

Physical examination revealed an emaciated lady in obvious painful distress, conscious and anxious, febrile (temperature 37.4°), not pale, anicteric with no pedal enema, and no significant palpable peripheral lymph nodes. Her pulse rate was 100 beats per minute, full volume and regular. Blood pressure was 150/90 mmHg. Respiratory rate was 22 cycles per minute. Chest examination was unremarkable. Abdominal examination revealed a large umbilical hernia, with a tender non-reducible swelling measuring 15cm x 20 cm in widest diameter. There was hyperpigmentation of the skin and multiple loculations of four finger-like projections measuring 6cm by 4cm in length. There was a huge uterine mass corresponding to the size of a 36 weeks' gestation. There was no ascites. The pelvic examination revealed healthy vulva and vagina. Cervix was central with the os closed. Uterus was grossly enlarged, and adnexa was filled with the abdominal mass. There was no blood stain on examining finger.

2.3. Investigations

The full blood count done revealed a packed cell volume of 34%. All other parameters were within normal limit. Her chest radiograph was normal. Fasting Blood Sugar was 5.8mm/l. Abdomino-pelvic ultrasound scan revealed a huge uterine fibroid and incarceration of a bowel loop in the umbilical hernia. The CA125, and alpha fetoprotein were not done.

2.4. Treatment

Patient was placed on nil per oral (NPO), with intravenous infusions, analgesics and antibiotics. The umbilical hernia reduced thereafter leaving a flabby thin-skin pendulous umbilical mass with a 4cm defect. Patient was properly worked up for surgery after 48hours. Grouped and cross matched blood was made available. The surgical team comprised of a General Surgeon, Gynaecologist, Anaesthetist, Theatre Nurses and Haematologist. She had myomectomy and hernia repair done. Intraoperative findings; Forty-four (44) fibroid

Nodules of varying sizes with largest measuring 10cmX8cm.Total weight of fibroid was7kg

- Her post-operative period was uneventful. She was discharged home on the 7th post-operative day. Her two (2) weeks follow-up visit was also satisfactory. Histology revealed leiomyoma and hernia sac.

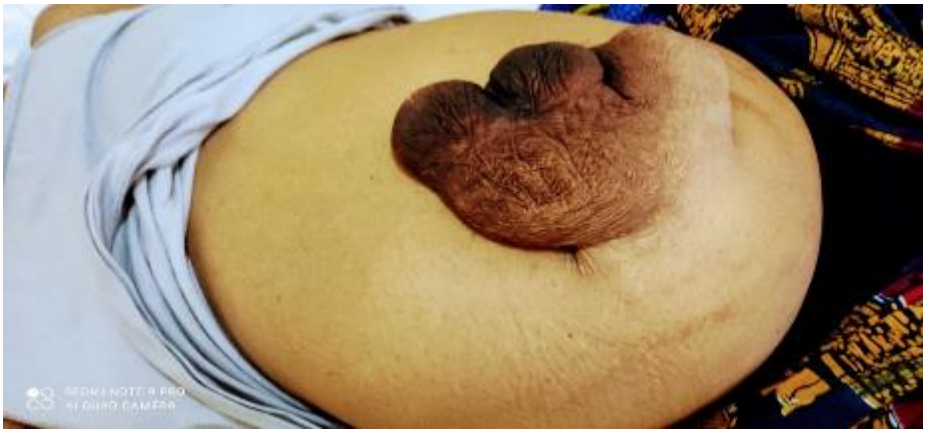

Figure 1 Patient before surgery (Superior view)

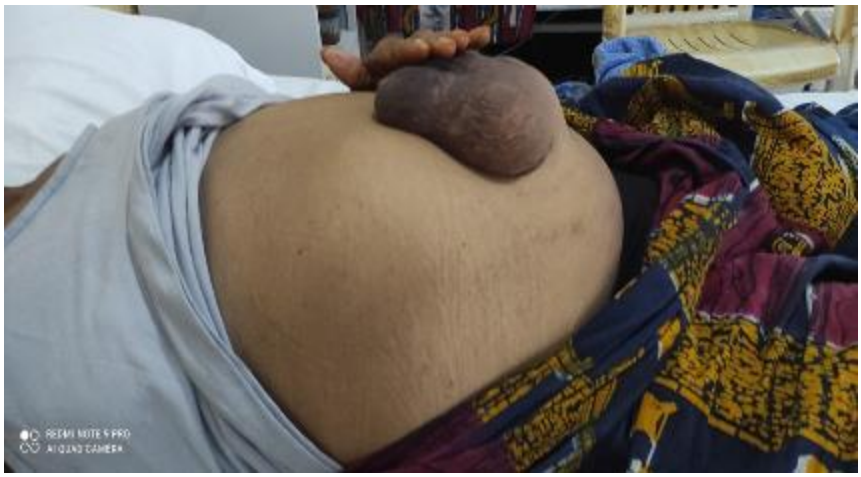

Figure 2 Before Surgery (Lateral view)

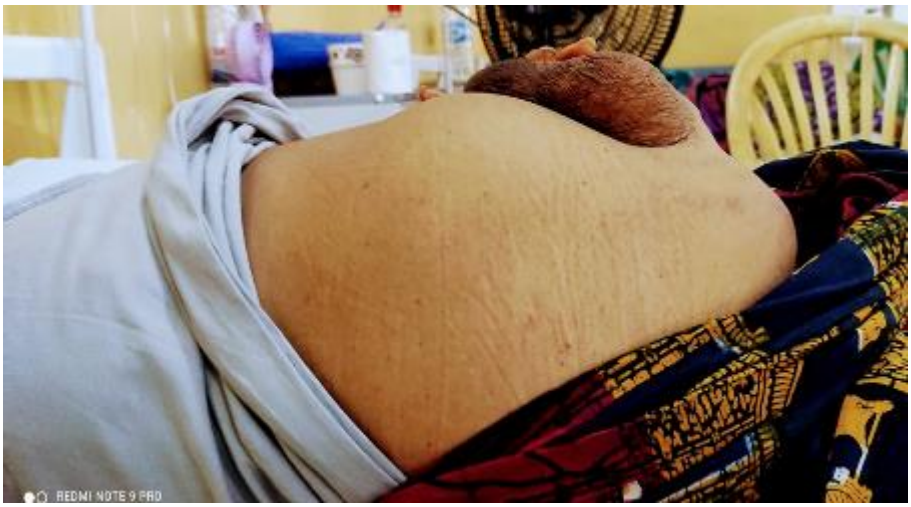

Figure 3 Before surgery (Superior lateral View-Reduced)

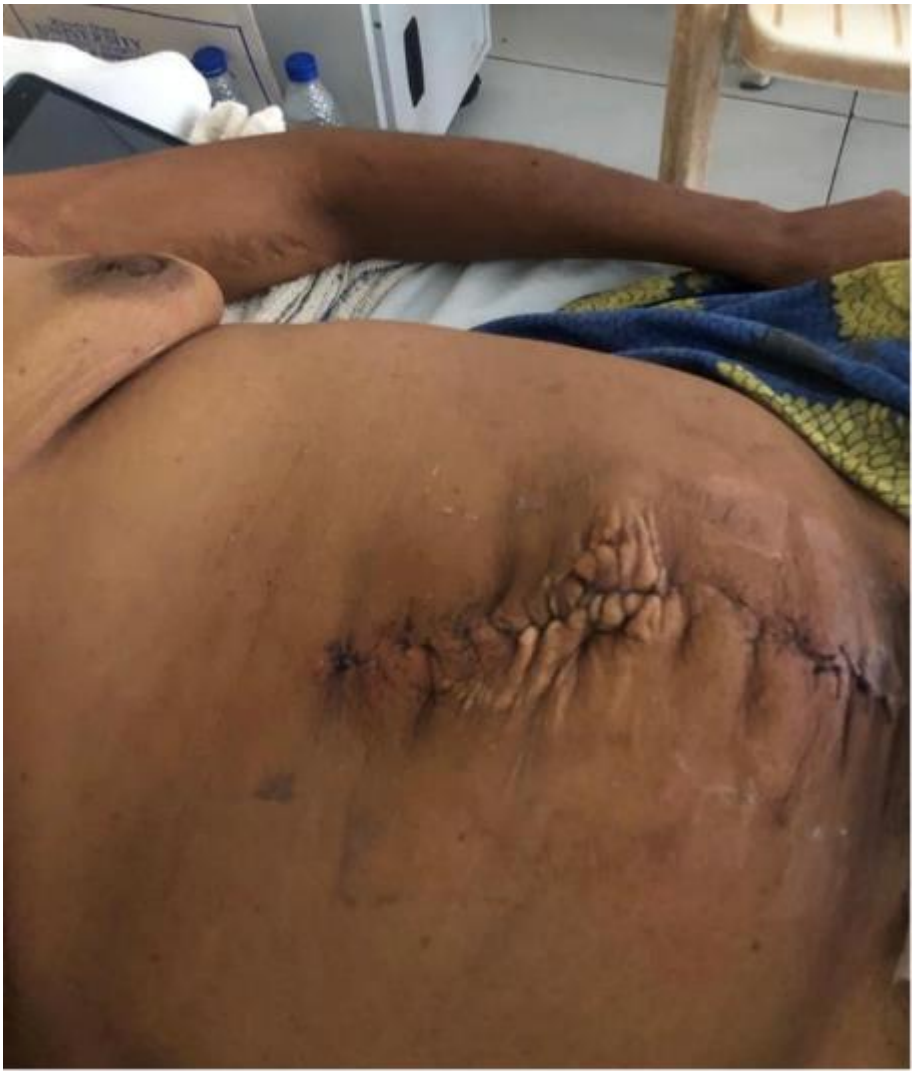

Figure 4 (after surgery)

3. Discussion

Late presentation of surgical diseases and their care in Africa has been studied and lack of awareness, socio-cultural factors (such as religious belief, traditions), political factors, geographical factors, and fear as factors affecting health seeking behaviour [19-21]. Late presentation of fibroid among African women has also been traced to their preference for other less invasive options of care due to multiple reasons[22]. This patient had a longstanding (seven years) history of uterine fibroid for which she had declined an offer of myomectomy a year ago; had an eight-month-old umbilical hernia; and presentation as emergency with features of intestinal obstruction. These features share similarity with typical late cases that present in our sub region. However, it is different from other cases reported in that it involves an obstructed (small defect) large umbilical hernia with a background huge uterine fibroid. Small-size umbilical hernia defect which explains the occurrence of obstructive symptoms. The large size of the hernia and the hyperpigmentation suggests that the lesion may have been for a longer duration or there may have been some application of traditional herbal products.

The fact that the patient was emaciated could mean poor food intake occasioned by poor socioeconomic status, reduced stomach storage capacity, pain from the obstruction or malignancy. However, the histopathology report showed no evidence of malignancy. Blood pressure of 150/90mmHg could be explained by the accompanied pain she had at presentation, as the value normalized following relief of obstruction without offering antihypertensive. The huge size of the fibroid rather corroborated some neglect, or some socioeconomic concerns that may have prevented the patient from having the offered myomectomy. The underlying intra-abdominal mass was a huge uterine fibroid that had distended the anterior abdominal wall. This had led to a weakness in the umbilical scar, creating a defect with herniation of peritoneum through the defect forming a sac over time, the sac had increased in size up to the level at which she presented. A huge uterine fibroid usually caused increased intra-abdominal pressure. Pressure symptoms on adjacent

structures like hydronephrosis, urinary retention, faecal retention, pedal oedema and respiratory difficulties due to elevation of the diaphragm. However, our patients renal function test was normal. Unlike an earlier reported case in Port Harcourt where atypical fibroid mimicked malignancy[18], the CA125, and alpha fetoprotein were not done as our patient presented as emergency. There was no ascites. Sadly, though, the consequence of delay in seeking surgical services and decline of offered myomectomy was a huge fibroid, complicated by a large size umbilical hernia that presented as emergency, threatening life. Herniation of part of the loop of intestine through the sac led to the obstruction. She had myomectomy and repair of the umbilical defect and excision of the giant sac (through midline rectus sheet closure) with an uneventful post-operative period and the histopathology result revealed leiomyoma and hernia sac. She could have benefited from hysterectomy, considering her age. But patient refused to give consent for hysterectomy. She planned to have Invitro Fertilization (IVF) in future.

4. Conclusion

This report not only showcases the unusual presentation of huge uterine fibroid with large umbilical hernia, but also highlight a picture of neglected surgical conditions in our practice. This was the reason why such twin huge conditions would present as emergency. Early detection and intervention would have led to the prevention of this giant hernia complicating uterine fibroid. There is need for the political, administrative and professional, etc. personnel in positions of authority to act in order to forestall such occurrence among patients in our sub-region.

Compliance with ethical standards

Acknowledgments

We wish to acknowledge miss B.O for her consent to present this case report.

Disclosure of conflict of interest

No conflict of interest.

Statement of ethical approval

Institutional Research Ethics approval was obtained.

Statement of informed consent

Written consent of the patient was secured.

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