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CHALLENGES WITH LARGE UTERINE FIBROIDS- A TREASURE HUNT

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KEYWORDS :

INTRODUCTION

The uterine fibroids are the most common benign pelvic tumors in females that grow monoclonally from the smooth muscle cells of the uterus. These fibroids may occur as a single lesion or as multiple lesions as reported in two-third of the cases, with variation in size from microscopic to large macroscopic extent. Uterine fibroids require surgery when symptomatic. Initially, both progestins and estrogen–progestin combinations have been utilized. A major step forward was achieved when peptide analogs of the GnRH were introduced, first those with superagonist properties and subsequently those acting as antagonists. Initially, the latter produced side effects preventing their routine utilization; eventually, this problem was overcome following the synthesis of cetrorelix. Because both types of analogs produce hypoestrogenism, their use is limited to a maximum of 6 months and, for this reason, today they are utilized as an adjuvant treatment before surgery with overall good results. Over the last decade, new, nonpeptidic, orally active GnRH-receptor blockers have also been synthesized. One of them, Elagolix, is in the early stages of testing in women with fibroids. Another fundamental development has been the utilization of the so-called selective progesterone receptor modulators, sometimes referred to as "antiprogestins". The first such compound to be applied to the long-term treatment of fibroids was Mifepristone; today, this compound is mostly used outside of Western Countries, where the substance of choice is Ulipristal acetate. Large clinical trials have proven the effectiveness of Ulipristal in the long-term medical therapy of fibroids, although some caution must be exercised because of the rare occurrence of liver complications. All selective progesterone receptor modulators produce unique endometrial changes that are today considered benign, reversible, and without negative consequences. In conclusion, long-term medical treatment of fibroids seems possible today, especially in premenopausal women.

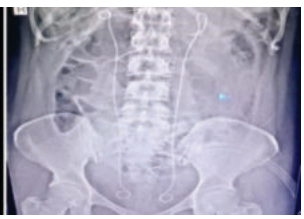
CASE DETAILS

Case no:1- Mrs. X, 46 years old P2L2 presented with complaints of abdomen distension for past 5 years.. On examination hard irregular mobile mass of 32 weeks size was present .USG and MRI was suggestive of bulky uterus with multiple intramural fibroids of varying size involving both and anterior and posterior wall of uterus. Largest size 15x12x12 cm with bilateral mild hydro uteronephrosis..

Case no 2- Mrs.Y,47y Nulligravida presented with c/o abdomen distension with abdomen pain x 9 months.O/E-Uterus size-32weeks,firm,mobile mass palpable, Umbilical hernia+. USG-suggestive of Large fibroid uterus , multiple fibroid uterus with largest measuring 20x17x11cm subserosal fibroid+ in anterior uterine wall with periumbilical hernia noted

Preoperatively ureteric stenting was done for both patients. Adequate blood products reserved. Total abdominal hysterectomy with bilateral salphingo oophorectomy done. For Case no 1- Total weight of fibroid - 5.2 kg. Intra operatively two units blood transfusion was done. For case no 2, total weight of fibroid was 4.4 kg , additionally umbilical hernia repair was done. Post op period- uneventful.

Figure (1).



Figure(2)

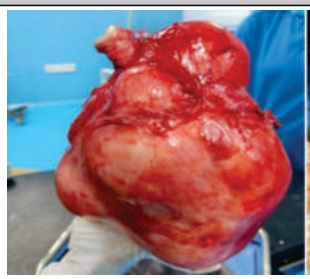


Figure (3).

Figure (4)

DISCUSSION

Large uterine fibroids In symptomatic women most likely suffer from abnormal uterine bleeding as well as dysmenorrhea. It is believed that Uterine fibroids cause abnormal menstrual bleeding by altering local and distant endometrial gene expressions, which subsequently alters endometrial function. Uterine fibroids affect the normal endometrium by modifying the vascular architecture, impairing the normal contractility, and altering the production of angiogenic factors (VEGF, VEGFA, and ET-1), cytokines (TNF-α), chemokines, growth factors (TGF-β, bFGF, EGF, PDGF, and PDEF), prostaglandins (PGF2α), and factors involved in coagulation and fibrinolysis (PAI1, tPA, ATIII, and TM). It is of importance to investigate the mechanisms underlying Heavy menstrual bleeding and subfertility , secondary to decreased receptivity and implantation in women with Uterine fibroids and to better understand the processes underlying the pathophysiology so that new therapeutics can be identified.

Overall, some of the main factors that affect fertility in women with uterine fibroids are distortion of the endometrium and uterine cavity, interference with the normal patterns of endocrine function, abnormal uterine vascularization, endometrial inflammation, and dysfunctional uterine contractility.

Several mechanisms have been proposed to explain the effects of UFs on fertility, including simple physical impedance by obstructing the transport of gametes or embryos. Other mechanisms delay implantation by altering the normal pattern of myometrial contractions (Lyons et al., 1991), inducing a chronic inflammatory reaction and fibrosis, and impairing endometrial decidualization in the mid-luteal WOI by significantly reducing the concentrations of both macrophages and NK cells. A Large fibroid is difficult to diagnose clinically and also with ultrasound. These patient need MRI to confirm the diagnosis and to differentiate from uterine sarcoma, ovarian tumor and other intraabdominal mass. Renal function and ureter position should be assessed prior to surgery. A Pre operative stenting will avoid ureteric injury. Total abdominal hysterectomy with bilateral salphingo -oophorectomy will be the treatment of choice in cases of large uterine fibroids.

CONCLUSION

Attempts at a nonsurgical treatment of uterine leiomyomas probably began hundreds of years ago, but scientifically validated modalities became available only some 40 years ago. During this relatively short period of time, several regimens were introduced using different categories of drugs. Today, the most promising belong to two categories: Progesterone receptor modulators and orally active GnRH receptor blockers. However, large uterine fibroids require surgical

removal.

REFERENCES

1. Al-Hendy A, Myers ER, Stewart E. Uterine fibroids: burden and unmet medical need. Semin Reprod Med. 2017;35(6):473–80.
2. Steward RG, Denhartog HW, Katz AR. Giant uterine leiomyomata. Fertil Steril. 2011;95(3):1121.e15-7
3. Zimmermann A, et al. Prevalence, symptoms and management of uterine fibroids: an international internet-based survey of 21,746 women. BMC Womens Health. 2012;12:6.
4. Oelsner G, et al. Giant uterine tumors: two cases with different clinical presentations. Obstet Gynecol. 2003;101(5 Pt 2):1088–91
5. Jenne JW, Preusser T, Günther M. High-intensity focused ultrasound: principles, therapy guidance, simulations and applications. Zeitschrift für Medizinische Physik. 2012;22(4):311–322.
6. Brown MRD, Farquhar-Smith P, Williams JE, Ter Haar G, Desouza NM. The use of high-intensity focused ultrasound as a novel treatment for painful conditions – a description and narrative review of the literature. Br J Anaesth. 2015;115(4):520–530.
7. She WH, Cheung TT, Jenkins CR, Irwin MG. Clinical applications of high-intensity focused ultrasound. Hong Kong Med J. 2016;22:382–392.
8. Donnez J, Donnez O, Dolmans M-M. With the advent of selective progesterone receptor modulators, what is the place of myoma surgery in current practice? Fertil Steril. 2014;102:640–648.