



# Management of Inoperable Recurrent Endometrioma Presenting as Severe Incapacitating Pain Following Leuprolide Acetate Depot by Aspiration, Recurring Again a 2 Yrs Subsequently for Sclerosing Therapy at Present: A Case Report

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## Abstract

A case report of a 32 year old patient presenting with inoperable recurrent endometrioma following previous 3 laporotomies with incapacitating pain and very poor General physical examination(GPE) and poor quality of life( QOL) with recurrent vomittings and dehydration setting in managed with leuprolide acetate 3.75 mg depot injection after which transvaginal sonography( TVS) aspiration of bilateral endometrioma done-in view of long aspiration time under GA Sclerotherapy has not attempted but patients pain disappeared magically and she remained alright for 2 years and presented again with similar findings but for unilateral endometrioma. Although re aspiration was planned along with Sclerotherapy with leuprolide plain with cefperazone it got postponed due to lockdown and curfew due to COVID setting in.

**Keywords:** Recurrent endometrioma; Sclerotherapy; TVS Aspiration

## Introduction

Endometriosis represents an enigmatic disease where following decades of studying and trying to find a permanent medical cure has eluded us just like Socrates quoted - I neither know nor think that I know. By definition it is presence of endometrial-like tissue outside the uterus & associated with a chronic inflammatory reaction. Cellular proliferation, invasion, and neoangiogenesis are key to the establishment, progression and recurrence of the disease. Lot of etio pathophysiology have been proposed over yrs with newer therapies developed but practically all therapies are suppressive, not curative, with high recurrence. Deep infiltrating endometriosis is a subtype involving, rectovaginal septum, bowel, ureters or bladder. For hormone suppression gonadotropic

releasing hormone (GnRH) agonists are usually the 1st agents because they suppress ovarian hormone production and inhibit the growth of the extrapelvic endometrial tissue [1-3].

Endometriosis as a major cause of chronic pelvic pain (CPP), acts as a cyclic source of peripheral nociceptive input. Recent data supports the hypothesis that changes in the central pain system also play an important role in the development of chronic pain, regardless of the presence of endometriosis. Further decrease in gray matter volume has been proposed in those women presenting with endometriosis along with severe pain [2]. Multidisciplinary approaches to the sensitized patient should also be considered, such as physiotherapy, and cognitive treatment although more clinical trials specifically in endometriosis is required [4-7].

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SUNTEXT REVIEWS

Treatment choices for symptomatic endometriosis are based on patient preferences, treatment goals, the side effect, efficacy, cost, associated comorbidities and availability. Earlier sclerotherapy utilizing ethanol has been considered an option in infertile cases who present with pain as an option [8,9] although surgery is the only permanent answer with removal of both ovaries till date with extensive evaluation of decades.

**Case Report**

A 32 year old patient who had been married for 10 years presented to us in feb 2018 with history of previous 3 laporotomies for fibroid uterus and endometriosis at kamal hospital in 2012 for fibroid uterus then subsequently for endometriosis. Now again she had a laporotomy for huge bilateral endometriomas was attempted although it was only open and close in view of marked adhesions with intestine and abandonment of surgery during the last attempt.

She was a case of primary infertility although they had adopted a daughter 5 years back and had come now only for severely incapacitating pain that made her quality of life (QOL) v poor, totally unable to sleep at night and whole family was upset. On General physical examination (GPE), she was badly incapacitated, unable to stand, getting vertigo so much so that it was v tough to examine and make her lie down for ultrasonography (USG).

General physical examination (GPE) -Weight-55kg; Height-154cm; Body mass Index (BMI)- 28.196Kg/m<sup>2</sup>; BP-110/70mmHg, Cycles regular lmp-30/3/17)

**Investigations**

- Hb-8.5gm, TLC-8300, DLC-P48L49E1M2 Built upto Hb-11.2g, TLC-10.300, DLC-P67L28M2E3 RBC-3.83m/m<sup>3</sup>
- Hct -35.7%, MCV-39.9%, Platelet Count-2.75lakh, ESR-170mm/h, RFT-BU-59mg, SCr-1.5 LFT-SB-T-0.7, D-0.3
- Sgot-39(5-35), sgpt-27.67(5-35), AP-112(60-170), BT-3'15'', CT-4'20'', APTT-29(22-32sec)
- HIV/HBsAg/HCV/VDRL-Non reactive
- 20/3/2020T3-1.60ng/ml
- T4-10.02µG/dl(5.01-12.45)
- TSH-2.38(0.550-4.780UIU/ml)

With great difficulty USG has done revealed huge bilateral endometriomas measuring left 69.9 x 42.7mm and right 53.7 x 31.9 mm and uterus badly sandwiched between them and hence difficult to visualize.

A magnetic resonance imaging (MRI) done earlier on 21/3/2018 revealed a lobulated complex space occupying lesion (SOL) measuring 67 x 65 x 50mm, with another similar space occupying lesion (SOL) visualized measuring 31 x 30 x 29mm. Both ovaries

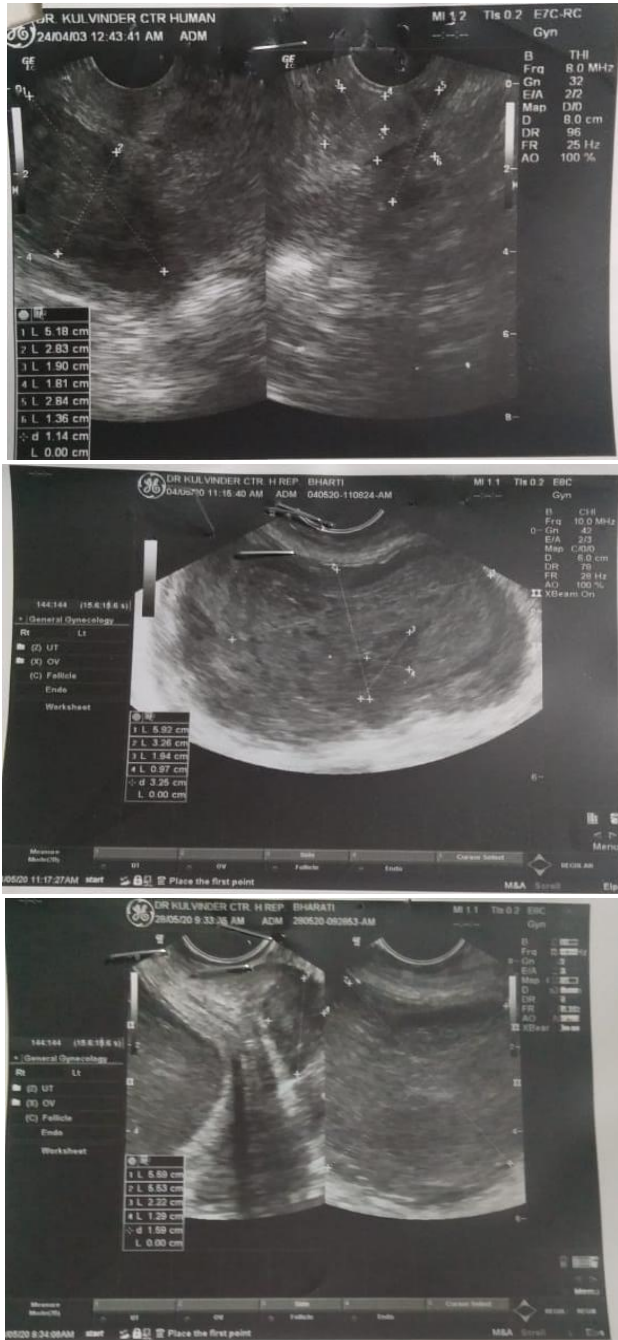
are not separated out. Uterus is nor in size and attenuation. A lobular heterogenous area is seen in anterior wall of myometrium measuring 39 x 30mm consistent with the anterior wall fibroid uterus. Liver, Gall Bladder, Pancreas, spleen and both kidneys were normal.



Her general physical examination (GPE) was very poor hence it was decided to build up her GP status and injection leuprolide acetate 3.75 mg depot was administered to somehow ensure relief of pain in a situation where although she wanted laporotomy and TAH despite infertility to relieve her pain, in view of an open and close that was not entertained with the risk of injuring intestines along with very poor GPE. We started rehydrating her with 5 bottles of fluid with ringer lactate, normal saline and 5% dextrose for a week in view of constant vomiting's associated with severe pain abdomen. In view of the aggravation of pain due to flare effect we added letrozole 2.5 mg along with add back therapy of estradiol valerate 1.25 and medroxy progesterone acetate 2.5 mg daily along with daily voveran as well as tramadol and further adding gabapentine. After building her up after 28 days of leuprolide in view of pain and vomits not ameliorated we attempted aspiration of cysts under general anaesthesia (GA), and it took us over 2 hrs to aspirate the 2 cysts where one was easier than other to aspirate and had to stop after insistence of anaesthetist that better leave the 2<sup>nd</sup> one in view of repeated blockade of needle.

Post operatively we gave her antibiotics, letrozole, gabapentin, although she did not take any of these other than antibiotics. Subsequently her pain disappeared miraculously and repeating USG after 1week one ovary was totally free while v little remnant in 2nd ovary and as patient was so much relieved she decided to try to take fertility therapy. In view of her bilateral tubal blockade she could not afford IVF so she stopped follow up till she was all right and appeared after 2 yrs again with pain abdomen, this time with a unilateral endometrioma –although we planned re aspiration and this type inject plain leuprolide acetate along with cefferazone volume by volume say for 500 ml aspirated inject 1 unit /100ml of fluid hence 5ml leuprolide with 1gm cefferazone after washing thoroughly with normal saline. Initially due to

COVID break down and curfew and lockdown situation the aspiration got postponed and temporarily she was put on an selective progesterone receptor modulator (SPRM) (mifipristone 50 mg alternate day which as she did not take properly initially it was difficult to aspirate in view of no definite pockets identified for aspiration, although on taking it properly one could see the cyst again that could be aspirated. Since her BP had increased to 150/106mmhg she was put on antihypertensive and asked to get a COVID RT PCR done but fear of COVID testing made her disappear refusing to get the test done and patient has to appear with the report and BP controlled.



## Discussion

Normally as reviewed earlier only surgery is left for such tough cases but in view of inoperability we are considering sclerotherapy in this tough case as advocated by Yazhini in her large experience by utilizing leuprolide with ceferozime, getting 75% success rate in her long experience we planned to do this but due to circumstances it got postponed [10]. As per Cohen et al., the rate of Recurrent Endometrioma after sclerotherapy varied from 0-62.5% on conducting a Systematic Review and meta-analysis in the role of Sclerotherapy in the management of ovarian Endometrioma [8]. Alborzi et al reviewed advantages of surgery sclerotherapy with assisted reproductive therapy (ART) or ART alone and found better results if surgery or Sclerotherapy done with ART although not statistically significant [9]. Reviewing comparison of use of ethanol, methotrexate, vis a vis intra cyst aspiration and then sclerotherapy with leuprolide acetate plain with ceferazone had least recurrence rates and maximum success rates both in terms of preventing recurrence, pain and incidence of spontaneous or assisted conception with ART [10].

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