



Introduction

- Ovarian endometrioma is associated with poorer fertility outcome specially when bilateral(B/L).[1]
- GnRH agonist therapy reduces estrogen and shrinks endometriomas, improving fertility.

Objective

- To evaluate impact of GnRH agonist therapy on size of endometrioma, its effect on ovarian reserve & pregnancy outcome.

Case

- 21 year old P0L0A1
- Married for 2 years
- Symptom: Acute abdominal pain
- Spontaneous abortion at 10 weeks gestation (USG –ovarian cyst (L) of 49x31mm)
- Examination: Bimanual– Adnexal masses \approx 4x4cm (R) & 10x10 cm (L)

Investigations & Outcome

Pre-therapy

Cyst size-
80x82mm(L),
53x44mm(R)
S. AMH-
2.3ng/ml
Ca125-317 U/L

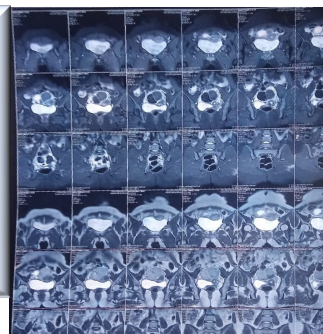
Therapy

Inj. Leuprolide
– 3.75mg
monthly x 3
months
Side effects-
Joint pain

Post-therapy

Cyst size -
40x40mm (L),
30x35mm (R)
AMH-
1.7ng/ml.

- Spontaneous conception 2 months later
- Caesarean section at 39 week gestation
- Per-operative- B/L ovaries \approx 40x35x35mm.



MRI- B/L Endometrioma

Follow Up

- At 6 months –endometrioma 22.5x21mm(L)
- Ca 125 – 32U/L.
- At 12 months- Normal USG.

Discussion

- Stable AMH levels[2].
- Reduction in cyst size.
- Favourable pregnancy outcome in B/L disease.
- Fertility outcome can be multifactorial- age, pre-therapy ovarian reserve, anatomical[3].

Conclusion

- Stable post therapy AMH level.
- A non-invasive alternative therapy for large endometrioma with good pregnancy outcome.

References

- [1]Yuonis JS et al: Impact of U/L vs B/L ovarian endometriosis on ovarian reserve: A systematic review. Human Reprod Update 2019,25: 375-391.
- [2]Marschalek J,et al. Impact of GnRH agonist on prolactin and sex hormone levels in endometriosis. Eur J Obstet Gynecol Reprod Biol. 2015;195:156-159.
- [3]Streuli, I et al AMH levels decreased only in women with previous endometrioma surgery. Hum. Reprod.2012,27, 3294-3303.

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