



# Successful IVF pregnancy After Conservative Medical Treatment of High Grade Endometrial Cancer

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## Objective :

About 7% of endometrial cancer occurs in reproductive years (below 45). NCCN oncology guidelines suggest that Disease limited to the uterus is best managed by surgery - Total hysterectomy and bilateral salpingo-oophorectomy (TAH/BSO) + surgical staging. Challenges are encountered in women who didn't complete their families. Hormonal Therapy is the best option in Uterine-Limited low grade Disease (G1) e.g. : Megestrol acetate, Medroxyprogesterone acetate with or without levonorgestrel IUD. Our case highlights that hormonal treatment can be successfully used for fertility preservation followed by in vitro fertilisation (IVF), even in higher grade endometrial cancer (G2).

## Case Report :

31 year para1 living 0, was following in fertility clinic with secondary infertility. Transvaginal ultrasound (TVS) revealed a thickend endometrium & polyp. Hysteroscopy, dilatation & curettage done, unfortunately histopathology revealed endometriod endometrial carcinoma FIGO grade 2, confirmatory second endometrial sample was taken. CT scan chest & abdomen revealed polycystic ovaries & disease limited to endometrium without evidence of invasion, no local or distant metastasis. Genetic testing revealed oestrogen & progesterone receptor negative, with no other mutation (e.g Lynch syndrome). Multidisciplinary team meeting (MDT) was arranged, favouring (TAH/BSO) + surgical staging in view of high grade cancer but patient strongly refused as she was seeking fertility treatment. Patient had only one previous spontaneous delivery, pretermat 24 weeks, baby expired due to prematurity

### Figure 1- CRITERIA FOR FERTILITY-SPARING MANAGEMENT OF ENDOMETRIAL CARCINOMA(All criteria must be met ):

- ✓ Well-differentiated (grade 1) endometriod adenocarcinoma on dilation and curettage (D&C) confirmed by expert pathology
- ✓ Disease limited to the endometrium on MRI (preferred) or transvaginal ultrasound
- ✓ Absence of suspicious or metastatic disease on imaging

- ✓ No contraindications to medical therapy or pregnancy
- ✓ Patients should undergo counseling that fertility- sparing option is NOT standard
- ✓ Consultation with a fertility expert prior to therapy
- ✓ Recommend molecular evaluation of tumor and evaluation for inherited cancer risk e.g. Lynch syndrome (UN-1)

Case was rediscussed in MDT and agreed on hormonal treatment with high dose oral megestrol 320 mg/d with follow up histopathology at 3, 6 month (Both revealed normal endometrial biopsy & cured cancer). Patient then had successful IVF, by short antagonist protocol, TVS confirmed single alive fetus at 8 weeks. Though pregnancy was successful, Our patient is still at 8 weeks, further follow up is required for final pregnancy outcome.

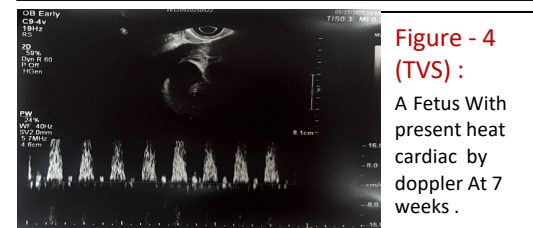
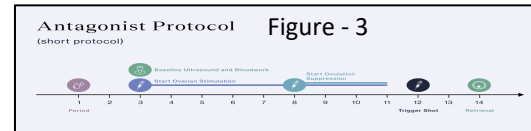
## Discussion:

Management of endometrial cancer in young women who desire fertility, represents many challenges where standard surgical treatment based on hysterectomy and bilateral salpingo-oophorectomy (TAH+BSO) is not compatible with patient's goals. Reproductive-age patients not only with low-risk EC but selective high grade EC should be asked about whether they wish to preserve fertility. For those who are candidates the most common approach is progestin therapy and deferral of surgical staging (including hysterectomy and bilateral salpingo-oophorectomy) until after completion of childbearing. Conservative hormonal regimen here is possible here with follow up endometrial biopsy every 3-6 months to confirm Complete response by 6 month before fertility treatment & IVF.

### Figure 2- Hormonal Therapy for Uterine-Limited Disease Preservation for Fertility;

#### Continuous progestin- based therapy:

- ✓ Megestrol Medroxyprogesterone or Levonorgestrel IUD
- ✓ Consider dual- progestin therapy [(megestrol
- ✓ ◇ Megestrol acetate + levonorgestrel IUD
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- ✓ Other Recommended Regimens; Added the following new bullet and sub-bullets. ◇ Lenvatinib



## Conclusion :

Although Fertility-sparing management in patients with EC is reserved for low-risk disease as the only candidates, with progesterone +/- mirena IUCD. Follow up required Endometrial evaluation every 3-6 months Till complete response seen by 6 months. This case report highlights that should not be limited to at low risk but some selective high grade EC higher grades as G2 endometriod endometrial cancer, who can benefit too from this protocol especially women seeking fertility. Though Patients should be counseled that the risk of recurrent or persistent disease is likely higher than with hysterectomy. If Endometrial cancer present at 6-12 months advise total hysterectomy / BSO with staging. After fertility treatment and delivery completed, Continuous surveillance & endometrial biopsy is required every 6-12 month and consider maintenance progestin- based therapy after patient childbearing completed.

Follow up with (TAH +/- BSO / surgical staging) once family completion is mandatory.

## References:

1. NCCN Guidelines Version 1.2025 Endometrial Carcinoma
2. UpToDate 2025

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