FERTILITY PRESERVATION IN ENDOMETRIOSIS PATIENTS

Is it feasible from a public health perspective?

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OOCYTE CRYPRESERVATION. A REALITY


ASRM PAGES

Mature oocyte cryopreservation: a guideline

The Practice Committees of the American Society for Reproductive Medicine and the Society for Assisted Reproductive Technology

Society for Reproductive Medicine and Society for Assisted Reproductive Technology, Birmingham, Alabama

- ✓ Safe technique.

- ✓ Well established indications.
  - Medical: malignancies.
  - Social: moderhood deferred.
  - Technical:
    - Ovum banks
    - Storage of sparing gametes.
    - …
- ✓ Emerging indications.
  - Risk of premature ovarian failure…
    ENDOMETRIOSIS!

RATIONALE FOR FERTILITY PRESERVATION IN ENDOMETRIOSIS

Oocyte vitrification as an efficient option for elective fertility preservation

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ENDOMETRIOSIS AND FERTILITY

SURGICAL TREATMENT

✓Cystectomy is the standard technique *(ESHRE guideline 2014: Management of women with endometriosis)*

- Loss of follicles in the cyst wall.
- Decreased AMH after surgical excision.
- Halved ovarian response in COH in IVF cycles.
- Risk of POI and earlier menopause after bilateral endometrioma excision.

ENDOMETRIOSIS AND FERTILITY

ENDOMETRIOSIS

✓Endometrioma adversely affects ovarian reserve.

- Decreased AMH with bilateral endometriomas.
- Decreased AFC.
- Lower response to controled ovarian stimulation

FERTILITY PRESERVATION IN ENDOMETRIOSIS

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human reproduction **OPINION**

Fertility preservation in women with endometriosis: for all, for some, for none?

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FERTILITY PRESERVATION PROTOCOL FOR ENDOMETRIOSIS PATIENTS AT HCSC.

INCLUSION CRITERIA

- Age under 35.
- AFC≥6; FSH<10, AMH>1
- Bilateral endometriomas.
- Previous endometrioma excision and contralateral recurrence.
- Previous bilateral excision and new recurrence.

FERTILITY PRESERVATION IN ENDOMETRIOSIS. RESULTS AT HCSC. 2013-2015

PATIENTS BASAL FEATURES	
VARIABLE	n
No.of subjects	9
Age,y	30,96
BMI, kg/m2	23
AFC	5,33
FSH,IU	6
No. of endometriomas	2,37
Size of 1st endometrioma, mm	20,71
Size of 2nd endometrioma,mm	17,7

Patients basal features. BMI: body mass index; AFC: antral follicle count.
Note that AMH is not included since it available in all patients.

FERTILITY PRESERVATION IN ENDOMETRIOSIS. RESULTS AT HCSC. 2013-2015

CLINICAL OUTCOME	
VARIABLE	n
No.of cycles	11
rFSH dose ,IU, mean	1990
No of oocytes obtained, mean	8,08
No of MII oocytes vitrified, mean	7,30

- ✓ Antagonist multiple dose protocol was used following the usual criteria, employing recombinant FSH (rFHS, Gonal-F, Merck-Serono) and Cetrorelix (Cetrotide, Merck-Serono) as GnRH antagonist in all cases.
- ✓ Oocyte retrieval under sedation was performed after trigger shot with GnRH agonist (0.2 mg of triptorelin, Decapeptyl, Ipsen Pharma)
- ✓ One cycle was cancelled due to no response.

KEY POINTS

- Women with endometriosis should be informed about their specific risk of ovarian tissue damage and subsequent impairment in fertility.
- We consider there is a need for a fertility preservation protocol in endometriosis patients in the National Public Health.
- A cautious selection of the patients is advisable to ensure efficiency.
- Further evidence is needed to increase knowledge into fertility preservation results in endometriosis patients.
- A cost/effectiveness research would be useful to evaluate the feasibility of this indication in the Public Health Systems.