

Modified natural cycle IVF

the best of two worlds?



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Modified natural cycle IVF



natural cycle IVF



Modified natural cycle IVF



one follicle



no stimulation



one embryo

Nargund et al, 2007



Modified natural cycle IVF



failure oocyte retrieval 14%



cancel oocyte retrieval 29%



embryo transfer 46%

Pelinc et al, 2002



Modified natural cycle IVF



ongoing pregnancy rate 7.2%

Pelinc et al, 2002



Modified natural cycle IVF



Modified natural cycle IVF

more follicles

more oocytes

more embryos



Modified natural cycle IVF



more pregnancies

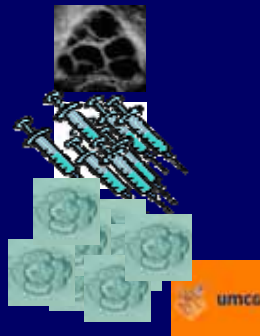


Modified natural cycle IVF

OHSS

discomfort

multiple pregnancies



Modified natural cycle IVF

patient friendly

- no ovarian stimulation
- easy oocyte retrieval
- short duration treatment cycle
- easily repeated consecutive months

low risk

- no OHSS
- singleton pregnancies

Pelinc et al, 2002



Modified natural cycle IVF

patient friendly

- no ovarian stimulation
- easy oocyte retrieval
- short duration treatment cycle
- easily repeated consecutive months

low risk

- no OHSS
- singleton pregnancies

high cancellation rate
low pregnancy rate

Pelinc et al, 2002



Modified natural cycle IVF

patient friendly

- no ovarian stimulation
- easy oocyte retrieval
- short duration treatment cycle
- easily repeated consecutive months

low risk

- no OHSS
- singleton pregnancies

modified natural cycle IVF

Rongieres-Bertrand et al, 1999



Modified natural cycle IVF

patient friendly

- no ovarian stimulation
- easy oocyte retrieval
- short duration
- easily repeated

low risk

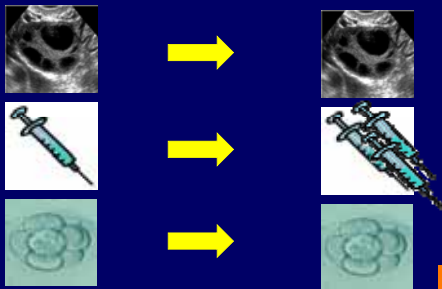
- no OHSS
- single pregnancies

modified natural cycle IVF
GnRH antagonist
lower cancellation rate

Rongieres-Bertrand et al, 1999



Modified natural cycle IVF



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patient friendly

- no ovarian stimulation
- easy oocyte retrieval
- short duration treatment cycle
- easily repeated consecutive months

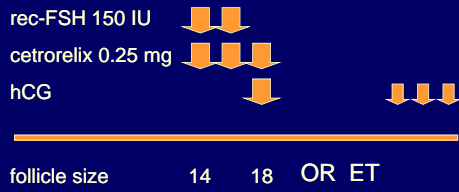
low risk

- no OHSS
- singleton pregnancies

Rongieres-Bertrand et al, 1999



Modified natural cycle IVF



Modified natural cycle IVF

questions

- (I) does it work?
- (II) for whom?
- (III) how many cycles?



Modified natural cycle IVF

does it work?

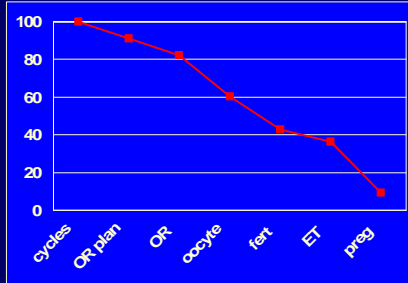
cohort studies

- 3 or 9 cycles / patient
- first IVF cycle
- < 37 years
- BMI 18-28
- conventional IVF (no ICSI)

Pelinck et al, 2005, 2006, 2007



Modified natural cycle IVF



Modified natural cycle IVF

does it work?

cohort studies

cancellation oocyte retrieval	13-18%
oocyte retrieval unsuccessful	23-27%
ET / cycle	37-44%

Pelinck et al, 2005, 2006, 2007



Modified natural cycle IVF

does it work?

cohort studies

ongoing pregnancy rate / ET	21-33%
ongoing pregnancy rate / cycle	8-14%

twin pregnancies	2-6%
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Pelinck et al, 2005, 2006, 2007



Modified natural cycle IVF

does it work?

cohort studies

ongoing pregnancy rate / cycle 8-14%
twin pregnancies 2-6%

cancellation oocyte retrieval 13-18%
oocyte retrieval unsuccessful 23-27%



Modified natural cycle IVF

does it work?

cohort studies

ongoing pregnancy rate / cycle
twin pregnancies

cancellation oocyte retrieval
oocyte retrieval unsuccessful

yes, but.....



Modified natural cycle IVF

for whom?

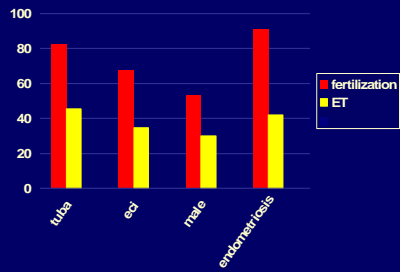
cohort studies

according to indication

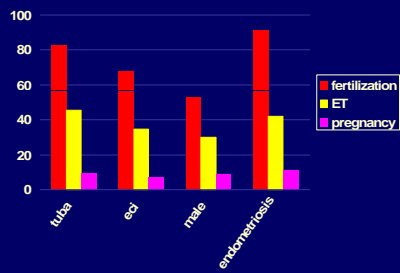
Pelink et al, 2005, 2006, 2007



Modified natural cycle IVF



Modified natural cycle IVF



Modified natural cycle IVF

for whom?

cohort studies

according to indication: no difference

Pelinc et al, 2005, 2006, 2007



Modified natural cycle IVF

for whom?

cohort studies

conventional IVF: all indications
ICSI

age < 37 years
age ≥ 37 years



Modified natural cycle IVF

for whom?

poor responders
history of severe OHSS

patients' choice



Modified natural cycle IVF

how many cycles?

pregnancy rate per cycle 8-14%

short duration treatment cycle
easily repeated consecutive months

cumulative pregnancy rate

Pelinck et al, 2007



Modified natural cycle IVF

how many cycles?

9 consecutive cycles
256 patients
conventional IVF
<37 years

Pelinck et al, 2007



Modified natural cycle IVF

how many cycles?

1048 cycles
clinical pregnancy rate / cycle 9.9%
twins 2.9%

Pelinck et al, 2007



Modified natural cycle IVF

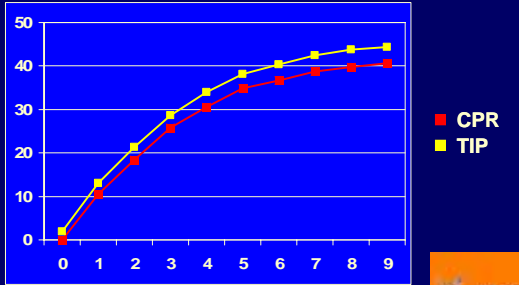
how many cycles?

clinical pregnancy rate / patient 40.6%
clinical pregnancy rate / patient 44.4%
median duration of treatment 20 weeks

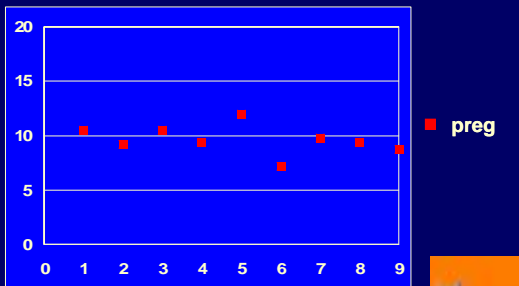
Pelinck et al, 2007



Modified natural cycle IVF



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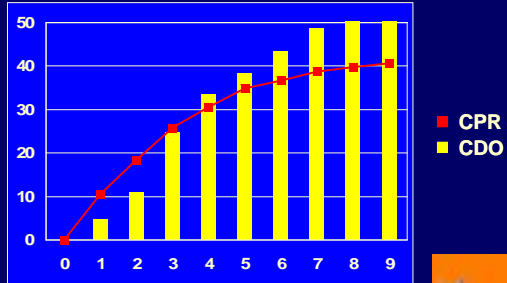
Modified natural cycle IVF

how many cycles?

selective dropout of poor prognosis patients



Modified natural cycle IVF



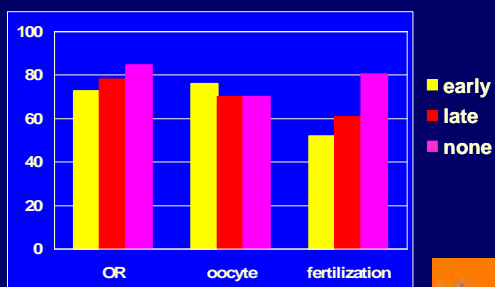
Modified natural cycle IVF

analysis of drop-out

early drop-out	drop-out after 1-4 cycles
late drop-out	drop-out after 5-8 cycles
no drop-out	9 cycles completed



Modified natural cycle IVF



Modified natural cycle IVF

selective drop-out

no oocyte retrieval
fertilization failure

predisposing for drop-out



Modified natural cycle IVF

selective drop-out

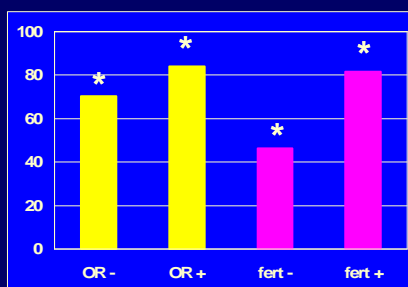
no oocyte retrieval
fertilization failure

predisposing for drop-out

repeating events ?



Modified natural cycle IVF



Modified natural cycle IVF

selective drop-out

no oocyte retrieval
fertilization failure

predisposing for drop-out

repeating events !



Modified natural cycle IVF

how many cycles?

selective dropout of poor prognosis patients

individually determined
based on results of first cycle



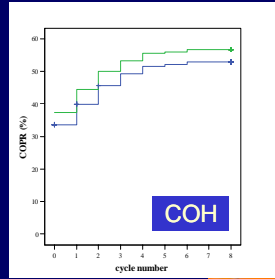
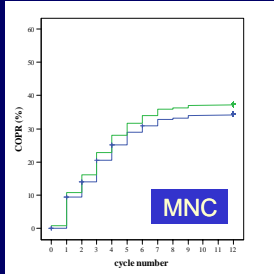
Modified natural cycle IVF

follow-up

COH-IVF after unsuccessful MNC



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yes, but...



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depends...



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Modified natural cycle IVF

questions

(I) does it work?

(II) for whom?

(III) how many cycles?

depends...



Modified natural cycle IVF

the best of two worlds?

maybe....



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thank you