

Terapia medica



TERAPIA DELL'INFERTILITA'

Counselling

- Trattare le comorbidità associate

Obesità, alcool, fumo, steroidi anabolizzanti, sport estremi (p.e. maratona), esposizione a fonti di calore (sauna, occupazioni esposte a fonti di calore), droghe, farmaci

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Ipogonadismi Ipogonadotropi Androgen treatment

Among male with prepubertal – onset gonadotrophin deficiency, at an appropriate chronological age it is conventional to commence androgen treatment to induce virilization and puberty

Liu et col . Hum Reprod Update 2003

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Ipogonadismi Ipogonadotropi Androgen treatment

- enantato 250 mg/21gg i.m.
- undecanoato 80-160 mg/die
- **gel transdermico 50 mg/die**
- cerotto 2.5-5 mg/die

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Ipogonadismi Ipogonadotropi Pulsatile GnRH therapy

Pulsatile GnRH resulted in a significantly faster onset of spermatogenesis than gonadotrophin therapy

Schopohl et al.1991

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Ipogonadismi Ipogonadotropi Pulsatile GnRH therapy

Whether Pulsatile GnRH has advantages over gonadotrophin therapy remains an intriguing possibility, but the additional cost and inconvenience is considerable and makes this method clinically impracticable

Liu et col . Hum Reprod Update 2003

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Ipogonadismi Ipogonadotropi Gonadotropin Preparation

- ✓ Human Chorionic gonadotropin (hCG) is purified from the urine of pregnant women and has predominantly LH-like activity
- ✓ hMG, derived from the urine of post-menopausal women, contains LH and FSH activities in equal proportions

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Ipogonadismi Ipogonadotropi Gonadotropin Preparation

Recombinant FSH is very effective with combined HCG in restoration of normal spermatogenesis and spontaneous pregnancy

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Ipogonadismi Ipogonadotropi Gonadotrophin replacement

HCG : 3000-6000 IU/week s.c. or i.m. for 6 months



If no sperm has appeared

FSH: 50-150 IU i.m or s.c. 3 time weekly

Both gonadotrophins can be mixed and administrated in the same syringe

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies

One opportunity for empirical hormonal therapy of idiopathic male infertility may be **to improve sperm quality** sufficient to allow IVF to be used instead **of ICSI** that requires greater gamete manipulation and is more costly

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies

GnRH treatment

There are no controlled studies examining the efficacy of pulsatile GnRH treatment for idiopathic oligo-astheno-teratozoospermia

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies
Gonadotrophin treatment

FSH with or without LH therapy cannot be recommended in unselected men; however, further research examining its impact on pregnancy rates in carefully selected infertile men, possibly in combination with artificial reproductive technologies, is warranted

Liu et col . Hum Reprod Update 2003

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INFERTILITA' IDIOPATICA Empirical hormonal therapies Androgen treatment

Given the weak rationale, and lack of efficacy from large studies, androgen therapy for idiopathic male infertility cannot be recommended

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies

Estrogen blockade

Aromatization of testosterone to estradiol is important in the negative feedback regulation of pituitary gonadotrophin secretion. Hence estrogen blockade at receptor or prereceptor (aromatase) levels may interfere with the normal negative feedback of sex-steroids, resulting in a increase in endogenous gonadotrophin production

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies

Estrogen blockade

Two non-steroidal antiestrogens TAMOXIFENE and CLOMIPHENE have been evaluated for empirical treatment of idiopathic male infertility

No significant treatment effect was found with Tamoxifen or Clomiphene

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies

Estrogen blockade

However... a uncontrolled study reported that testolactone (aromatase inhibitor) therapy in a subgroup of infertile men with decreased serum testosterone compared to estradiol (consistent with excessive aromatase activity) doubled sperm numbers and motility

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INFERTILITA' IDIOPATICA

Empirical hormonal therapies

Dopamine agonist treatment

Sperms parameters are also unchanged by bromocriptine therapy ,suggesting that this approach offers no promise as an empirical hormonal treatment of male infertility

Vandekerckhove et col. 2001

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INFERTILITA' IDIOPATICA Empirical hormonal therapies

Recombinant FSH, folic acid with zinco or
antiestrogens may be beneficial in some patients

TERAPIA DELL'INFERTILITA'

Empirical therapies

La terapia con **anti-ossidanti** migliorerebbe il pregnancy rate di coppie avviate alla PMA

Nessun studio ha documentato effetti collaterali di tali terapie

Incremento del numero di nascite statisticamente significativo rispetto al placebo (Cochrane analysis)

Acido folico, zinco, inositolo, coenzima Q-10, l-arginina, citrullina, ornitina, carnitina, proantocianidine, n-acetilcisteina, vitamine...

MAV
S U R G E R Y