Best Practice & Research Clinical Obstetrics and Gynaecology
Vol. 20, No. 5, pp. 647–664, 2006
doi:10.1016/j.bpobgyn.2006.04.005
available online at http://www.sciencedirect.com

2

# Rational diagnosis and treatment in infertility

Petra De Sutter* MD, PhD

Head

*Infertility Clinic, Department of Obstetrics and Gynecology, University Hospital Ghent, 185 De Pintelaan, B-9000 Gent, Belgium*

Subfertility is a statistical concept. When a pregnancy has not been achieved within a year of unprotected intercourse, the odds are that an underlying pathological mechanism is at play. Advanced female age, longer duration and primary infertility, are important prognostic factors, suggestive of low fecundity and indicating a need for further diagnosis and treatment. Many diagnostic tests only have screening value and the only gold standards are hysteroscopy and laparoscopy. Severely impaired semen quality should lead to andrological work-up. Postcoital test and endometrial biopsy are obsolete.

Treatment should preferably be aetiological, such as in anovulation, and sometimes also in endometriosis and tubal infertility. Primary treatment of male infertility is not proven to be advantageous. Conception-enhancing techniques such as intrauterine insemination (IUI), in vitro fertilisation (IVF) with or without intracytoplasmic sperm injection (ICSI), have shown to be effective. As a rule, and where possible, IUI is preferred and only if four to six cycles have failed should IVF be offered.

**Key words:** subfertility; infertility; diagnosis; insemination; in vitro fertilisation.

**Box. Question and Literature Sources**

*Question components*

Population: Infertile women/couples
Interventions: Available tests and treatments
Outcomes: Accuracy against suitable gold standards, pregnancy rates, take home baby rates, etc.

* Tel.: +32 9 240 3139; Fax: +32 9 240 4972.
*E-mail address*: petra.desutter@ugent.be.

1521-6934/$ - see front matter © 2006 Elsevier Ltd. All rights reserved.

*Literature sources*

Electronic databases: MEDLINE, EMBASE, Cochrane Library, Best Evidence, etc.

Manual search: Personal files of articles available with authors, reference lists of all known primary and traditional review articles.

Contact with experts.

## INTRODUCTION

Infertility is the domain in the field of obstetrics and gynaecology where evidence-based medicine (EBM) has made most of its victims. Tests once believed to be essential in the work-up of subfertility have now often proven useless, unreliable and even deceptive. In the past patients have been catalogued on the basis of tests that have been shown to be non-predictive and, therefore, untrustworthy, but labelling was thought to be essential, because no treatment could be started without a proper diagnosis. It was often not understood that subfertility is not a disease and that conception is the result of a multifactorial and random play of probabilities. The purpose of this chapter is to illustrate the relativity of infertility tests and to provide some rationality in the diagnosis of subfertility. Regarding treatment, things are possibly worse and there has been a tremendous evolution from the simple, cheap and patient-friendly treatment methods of the past, to the high-tech approach of assisted reproduction. Soon in vitro fertilisation/intracytoplasmic sperm injection (IVF/ICSI) will be performed together with preimplantation genetic screening in all patients, and rationality and cost-effectiveness will be forgotten in the race for the best per-cycle pregnancy rates.

## DIAGNOSIS

It is generally thought to be good clinical practice to establish a diagnosis prior to therapy. Based on logical thinking, circumstantial evidence and, at best, correlational evidence, flow charts of tests have been created in order to categorise infertile patients (male, tubal, endometriosis, unexplained,…) prior to treating them. A very interesting study from 1994[1] has shown that diagnostic methods are very limited in discriminating between fertile and infertile patients. Indeed, the authors of that study performed infertility tests in proven fertile women and demonstrated that at least one 'abnormal' test was found in 69% of fertile and 84% of infertile couples. With the exception of tubal disease and endometriosis, no significant differences could be demonstrated between groups for the remaining infertility factors.

### Medical history

As in all domains of medicine, history is important when dealing with infertile couples, since it can offer important clues regarding both diagnosis and prognosis. However, patient history is inherently subjective and subject to recall bias. There is also great inter-observer variability. In general, the *K*-value for history-taking (as well as for

Download English Version:

https://daneshyari.com/en/article/3908165

Download Persian Version:

https://daneshyari.com/article/3908165

Daneshyari.com