Appropriateness of H-IUI cycles in women over 40 years old: data from National Italian ART Registry 2005-2012

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Context: All ART Italian centres (402) which at least once during the study period have sent data on IUI-H cycles.

Objective: To evaluate the efficacy of Homologous Intra Uterine Insemination (H-IUI) treatments on women of different age classes and to analyse if its use was different between public and private clinics.

Methods: Retrospective analysis of aggregate data on ART techniques from 2005 to 2012. Results were stratified by four age classes. Participating ART centres were classified in public and private, according to the type of service and in other two classes according to their degree of specialization, namely those that only perform IUI-H procedures (level I) and those that perform IUI-H and other techniques, such as ICSI and FIVET, (level II).

Patient(s): infertile patients who underwent H-IUI treatment cycles.

Intervention(s): H-IUI cycles

Main Outcome Measure(s): Pregnancy rates by age, by type of service and level of clinic specialization and multiple pregnancy rate.

Result(s): During the study period, pregnancy rates from patients aged 40-42 and over 43 years old were 6.6% and 3.0% respectively, significantly lower than those from women younger than 34 (13.5%) and aged 35-39 (9.8%). Out of 246,487 H-IUI cycles analyzed, nearly 20.0% (46,979) of the H-IUI cycles were performed on women over forty years old. Moreover, private clinics obtain higher number of pregnancy rate than public clinics independently from the degree of specialization (12.8% vs. 9.4%). Overall the number of multiple pregnancy was 9.7% and the number of babies born after these infertility treatments was 17,248.

Conclusions: The low efficacy of H-IUI treatments cycles in women over 40 years old, observed in such a large number of cycles, suggests that the appropriateness of this kind of procedures for women over forty years old should be discussed with greater accuracy.