Comparison of clomiphene citrate versus recombinant FSH for ovarian hyperstimulation and intrauterine insemination (IUI) in unexplained infertility

Author Block: G. K. Mansour, A. Agarwal, R. Mahfouz, J. Goldberg, R. K. Sharma, T. Falcone; Cleveland Clinic, Cleveland, OH

Objective: Management of patients with unexplained infertility remains a challenge due to a lack of agreement on effective treatment modality. There is a lack of consensus concerning the drug of first choice in ovulation induction in patients with unexplained infertility. This study compares the efficacy of clomiphene citrate (CC) with recombinant FSH for ovarian hyperstimulation in an IUI program.

Design: Retrospective study at a tertiary care institution.

Materials and Methods: We included all patients diagnosed with unexplained infertility who underwent IUI after Clomiphine Citrate (CC) or after controlled ovarian hyperstimulation (COH) during 2001-2004. Patients were followed up and the outcomes recorded. A total of 417 cycles were included. Group I (n=234) included patients on CC 100 mg/day from day 3 to day 7 of the cycle, Group II (n=183) included patients on COH. They were subjected to pure follicle stimulating hormone and/or human menopausal gonadotropins. Ovarian response was monitored by transvaginal ultrasonography. 10,000 IU of human chorionic gonadotropin were given when dominant follicle reached maturity (16-18mm). A single IUI was performed 36 hours after human chorionic gonadotropin administration. IUI was performed with husband’s semen. The cumulative pregnancy rate per cycle as well as the miscarriage rate for each group was determined. Statistical analysis was performed using X2 and Student’s-test. Multiple logistic regression analysis was performed to control for age, type and duration of infertility.

Results: The clinical pregnancy rates per cycle in groups I and II were 29.5% and 33.3%, respectively (p>0.05). There were no statistically significant differences between the two groups in pregnancy rates considering the two protocols of ovulation induction (Table).

Conclusion: Ovarian hyperstimulation can be achieved by CC and rec-FSH in couples with idiopathic infertility that are treated with IUI. There is no significant difference in cumulative pregnancy rates between the above two modalities of ovarian hyperstimulation. CC, however, due to its lower cost, could be offered as the drug of first choice.

Financial Support: None.

Table 1 Pregnancy rate in unexplained infertility patients undergoing IUI on CC or FSH

<table>
<thead>
<tr>
<th>Group I (CC)</th>
<th>Group II (FSH)</th>
<th>P- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Pregnancy rate</td>
<td>23(54/235)</td>
<td>32.4(59/182)</td>
</tr>
</tbody>
</table>

Author Disclosure Block: G.K. Mansour, None; A. Agarwal, None; R. Mahfouz, None; J.
Goldberg, None; R.K. Sharma, None; T. Falcone, None.

Category (Complete): Clinical Female Infertility/Gynecology (GPC)
Topic (Complete):
  Topic : Ovarian stimulation

Additional Information (Complete):
  Presenting Author Fellow : No
  In-Training Awards for Research : True
  ACCME Disclosure : I will not be discussing non-FDA approved products
  I agree : True

Status: Complete
If you have any questions or experience any problems with the 2006 ASRM Abstract Submitter, please contact Customer Service at asrm@dbpub.com or call (800) 375-2586 or (617) 621-1398. Customer Service hours of operation: Monday-Friday, 9:00 AM-6:00 PM EDT.

Powered by OASIS, The Online Abstract Submission and Invitation System SM © 1996 - 2006 Coe-Truman Technologies, Inc. All rights reserved.