Hysteroscopic Findings Among A Cohort Of Infertile Nigerian Women Undergoing An IVF Program.

Ajayi A.B, Ajayi V.D, Kolade C.O.¹

Nordica Fertility Centre, Lagos Nigeria. ¹Nordica Fertility Centre, Asaba Nigeria.

ABSTRACT

Context: Among the various tools to assess the inner architecture of the uterus, hysteroscopy is considered to be the gold standard. The identification and subsequent treatment of uterine pathology hysteroscopically may positively impact on IVF success rates.

Objective: To document the hysteroscopic findings among a cohort of Nigerian women being worked up for IVF at Nordica fertility Centre Asaba.

Method: The biodata and findings at hysteroscopy of fifty consecutive infertile Nigerian women who had hysteroscopy between January and December 2010 were reviewed.

Results: The mean age of the women was 39.1 yrs (range=29-56yrs). The mean BMI was 27.9kg/m2. Secondary infertility was the main type of infertility (86%) and the mean duration of infertility was 9.6yrs. Female factor only was the leading cause of infertility (54%) while combined factor was 42%. Male factor alone was 4%. Of the 50 patients who had hysteroscopy, 38(76%) had abnormal findings. Intrauterine adhesions was the commonest abnormal finding among the women (30%). Endometrial polyps and sub mucous fibroids were seen in 18% and 16% of the patients respectively. Cervical stenosis was found in 8% of the patients. One patient (2%) had a complete uterine septum. All the 15 patients who had intrauterine adhesions had secondary infertility and 60% of all the patients with intrauterine adhesions had had a prior myomectomy (X2=5.712, P > 0.05).

Conclusion: Significant findings can be obtained from hysteroscopic assessment of the uterine cavity in infertile women undergoing IVF. The diagnosis and treatment of these conditions may improve IVF success.

INTRODUCTION

There are various tools to assess the inner architecture of the uterus. Hysteroscopy is considered to be the gold standard among them. The identification and subsequent treatment of uterine pathology hysteroscopically may positively impact on IVF success rates.¹,²,⁴

The objective of the study was to document the hysteroscopic findings among a cohort of Nigerian women being worked up for IVF at Nordica Fertility Centre, Asaba, Nigeria.
METHODS AND MATERIALS
The study was a retrospective study in which the bio-data and findings at hysteroscopy of fifty (50) consecutive infertile Nigerian women who had hysteroscopy between January and December 2010 at Nordica Fertility Center, Asaba were reviewed and documented. The women were presenting for the first time. Data analysis was done using SPSS version 17.0

RESULTS
The mean age of the women was 39.1 years (range=29-56 years). The mean body mass index (BMI) was 27.9 kg/m². Secondary infertility was the main type of infertility identified as 86% of the women had secondary infertility. The mean duration of infertility was 9.6 years. Female factor only was the leading cause of infertility (54%) while combined factor accounted for 42%. Male factor only was seen in 4% of the women. Of the 50 women studied 38 (76%) had abnormal findings at hysteroscopy.

TABLE 1: Hysteroscopic Findings.

<table>
<thead>
<tr>
<th>FINDING</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Intrauterine adhesions</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Endometrial polyps</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Submucous fibroids</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Complete septum</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Cervical stenosis</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>
All the 15 women who had intrauterine adhesions had secondary infertility. Nine (60%) of all the women with intrauterine adhesions had a prior myomectomy ($X^2=5.712$, $P>0.05$).

DISCUSSIONS
The mean age of the women was advanced. This coupled with long duration of infertility, almost 10 years, would suggest late presentation by these women.

Secondary infertility was commonest type of infertility. This could have etiologic significance with such factors as puerperal complications and unsafe abortion to be considered. It is also not surprising that all the women with intrauterine adhesions had secondary infertility. A high proportion of the women had abnormal findings at hysteroscopy. Leading abnormal findings were intrauterine adhesions, endometrial polyps and sub mucous fibroids.

Several years ago, Otubu and Olarenwaju found abnormality in 45% of the infertile Nigerian women who had hysteroscopy in their study. Intrauterine adhesions were also the leading abnormality (20%) in that study. This is similar to the findings in this study. This study however had a higher incidence of abnormality (76%) and a higher proportion of the women (30%) had intrauterine adhesions. Is the situation worsening?

It is noteworthy that 60% of all the patients with intrauterine adhesions had a prior myomectomy. Myomectomy could play a role in the high incidence of intrauterine adhesions and we probably need to re-examine our myomectomies.

CONCLUSION
We conclude from this study that significant findings can be obtained from hysteroscopic assessment of the uterine cavity in infertile Nigerian women undergoing IVF. The prevention, diagnosis and treatment of these conditions may improve IVF success.

REFERENCES
