Letters to the Editor
trocar insertion; therefore, it is particularly appealing as an alternative treatment modality. Retrospective design notwithstanding, our finding of methotrexate’s lower direct medical cost and lower success rate indicates that a prospective, randomized trial is imperative to establish unified guidelines on methotrexate treatment criteria, direct medical costs, and indirect or societal costs. Operator–receiver curves can then be used to determine the optimal stringency of treatment criteria that will maximize the number of patients eligible for the methotrexate treatment while maintaining a high efficacy rate and low cost.

References

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In-situ hybridization chromosome analysis of XYY and XXY males’ spermatozoa
Dear Sir,
We studied two oligozoospermic, abnormal karyotype men to evaluate the safety of using their spermatozoa for intracytoplasmic sperm injection (ICSI). Their karyotypes were 47,XYY and 46,XY/47,XXY. Fluorescent in-situ hybridization (FISH) was employed to analyse the genetic make-up of spermatozoa. Spermatozoa from a control subject was also analysed. No significant differences between the spermatozoa from the abnormal genotype subjects’ spermatozoa and the control spermatozoa were found (Table I).

The purpose of this study was to demonstrate that even in cases of mosaic aberrations, genetically normal spermatozoa are available for, and safe for use with, ICSI. No spermatozoa with abnormal karyotype were found in our study. Although the mechanisms of spermatogenesis are still not clearly understood, we surmise that the process itself safeguards against the production of genetically abnormal spermatozoa (Cozzi et al., 1994; Han et al., 1994; Martin et al., 1996). This suggestion is supported by the fact that XYY cells usually fail to develop into spermatozoa. Hence the high rate of azoospermia in men with abnormal karyotypes. ICSI and other assisted reproductive technology (ART) procedures are clearly viable treatment options for men with abnormal somatic cell karyotypes. However, in these cases it would be prudent to diagnose the embryo karyotype after fertilization and, prior to implantation and, at the appropriate time, amniocentesis should be performed.

Table I. Karyotypes obtained by fluorescent in-situ hybridization. Figures in parentheses are percentages

<table>
<thead>
<tr>
<th>Patient karyotype</th>
<th>No. spermatozoa tested</th>
<th>X-bearing spermatozoa</th>
<th>Y-bearing spermatozoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>47,XYY</td>
<td>60*</td>
<td>25 (41.7)*</td>
<td>34 (56.9)</td>
</tr>
<tr>
<td>46,XY/47,XXY</td>
<td>82</td>
<td>44 (53.7)</td>
<td>38 (46.3)</td>
</tr>
<tr>
<td>46,XY (control)</td>
<td>748</td>
<td>404 (54.0)</td>
<td>344 (46.0)</td>
</tr>
</tbody>
</table>

*One spermatozoon was unstainable, and so the karyotype could not be determined.

References

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