CHAPTER 10

The Relationship of Abnormal Semen Values to Pregnancy Outcome

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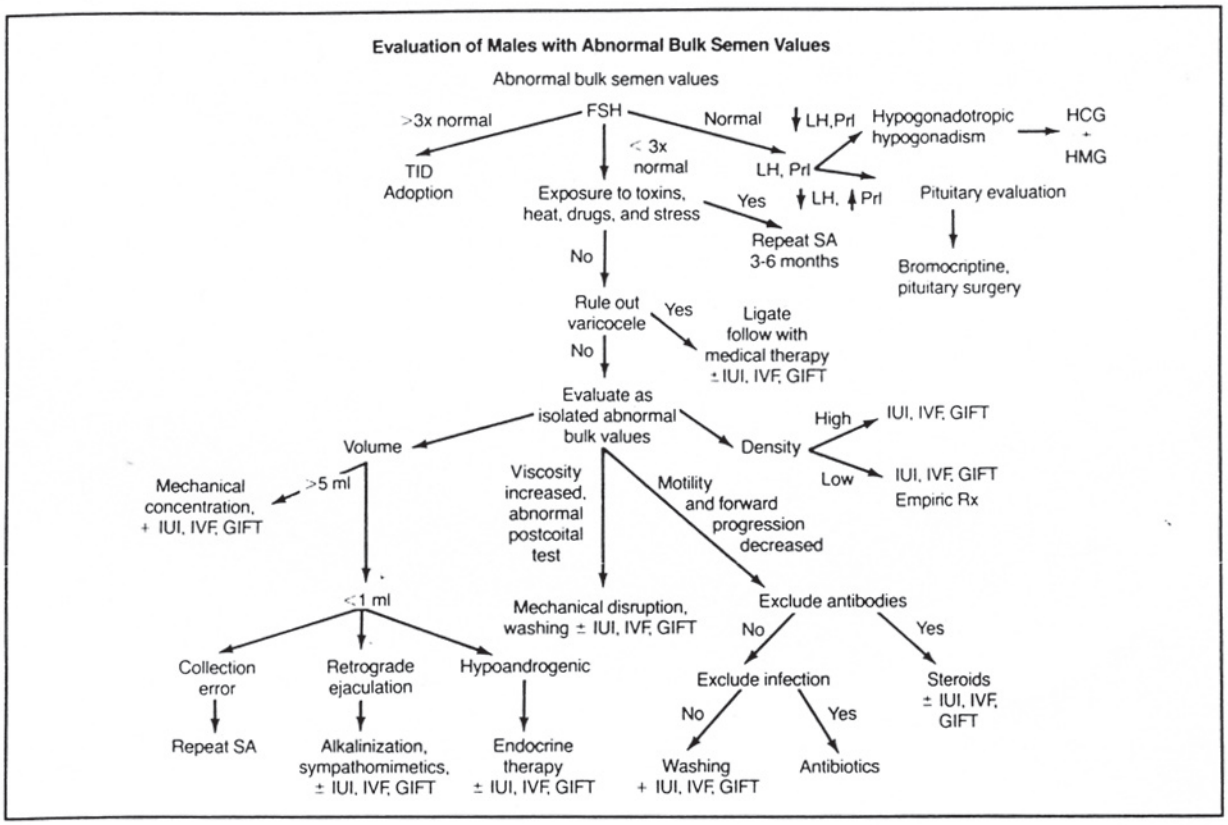

SEMEN ANALYSIS

The time-honored method of evaluating male infertility has been the semen analysis (sperm count). It has been assumed that if a man's sperm count is below a certain arbitrary minimum, he is infertile, and the couple's failure to achieve pregnancy is caused by his infertility. As recently as the early 1970s it was thought that a sperm count of under 40 million/cc meant that men were infertile, and urologists gave these couples a dire prognosis for pregnancy. If pregnancy did occur, it was ascribed to whatever useless treatment was being administered to the "infertile" husband. Since the early 1980s the sperm count thought to indicate infertility has been reduced to 20 million/cc. One group, however, reported pregnancy from a man who had only 50,000 sperm/cc. The man, the mother, and the baby were

sperm can provide an excellent view of the likelihood of fertilization, and it requires only small numbers of "fertile" sperm to do so.

Work using GIFT in couples in whom a male factor contributes to infertility supports the concept that even with reduced semen values (including a poor hamster test), improved treatment of the woman can yield normal pregnancy rates (J. Kerin and R. Marrs, personal communication, October 1987). With previous series both of these workers had noted lower pregnancy rates in such couples. With a more recent GIFT cycle, however, they used luprolide (TAP Pharmaceuticals, Chicago), a gonadotropin-releasing hormone agonist, as part of the stimulation protocol to ensure a synchronized, mature development of follicles. With that improved stimulation regimen, they achieved a 34% pregnancy rate.

Thus the most recent IVF and GIFT data support the concept presented here that even very low sperm counts do not preclude pregnancy, and treatment of the woman can result in pregnancy even when treatment of the man has been ineffective.

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