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Relationship between semen production and medical comorbidity

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 Article Info

Abstract Full Text References

Objective

To study the relationship between semen quality and current health status in a cohort of men evaluated for infertility.

Design

Cross-sectional study.

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Setting

Fertility clinic.

Patient(s)

Nine thousand three hundred eighty-seven men evaluated for infertility between 1994 and 2011.

Intervention(s)

None.

Main Outcome Measure(s)

Charlson comorbidity index, medical diagnoses by organ system.

Result(s)

At the time of evaluation, 9,387 men with a mean age of 38 years had semen data available. Of these men, 44% had at least one medical diagnosis unrelated to infertility. When stratifying the cohort by the Charlson comorbidity index (CCI), differences in all measured semen parameters were identified. Men with a higher CCI had lower semen volume, concentration, motility, total sperm count, and morphology scores. In addition, men with diseases of the endocrine, circulatory, genitourinary, and skin diseases all showed significantly higher rates of semen abnormalities. Upon closer examination of diseases of the circulatory system, men with hypertensive disease, peripheral vascular and cerebrovascular disease, and nonischemic heart disease all displayed higher rates of semen abnormalities.

Conclusion(s)

The current report identified a relationship between medical comorbidities and male semen production. Although genetics help guide a man's sperm production, his current condition and health play an important role.

Key Words:

[Fertility](#), [hypertension](#), [male infertility](#), [oligospermia](#), [vascular disease](#)

Seminal fluid and fertility in women

Fertility and Sterility, Vol. 106, Issue 3

Analysis of semen parameters in male referrals: impact of reference limits, stratification by fertility categories, predictors of change, and comparison of normal semen parameters in subfertile couples

Fertility and Sterility, Vol. 103, Issue 1

Semen parameter decline with advancing age: a cause for concern?

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Semen parameters during ZIKA virus infection in the olive baboon (*Papio anubis*)

Fertility and Sterility, Vol. 108, Issue 3

MiOXSYS: a novel method of measuring oxidation reduction potential in semen and seminal plasma

Fertility and Sterility, Vol. 106, Issue 3

M.L.E. holds stock in Sandstone Diagnostics. S.L. has nothing to disclose. B.B. is the founder of Auxogyn and cofounder of IVIGen. R.R.P. has nothing to disclose. M.R.C. has nothing to disclose.

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