

407.1 – STUDY ON EFFECTS OF MALE REPRODUCTIVE TRACT INFECTIONS WITH AEROBIC BACTERIA ON SPERM QUALITY

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Introduction: This study was performed to evaluate the association between male reproductive tract infections with aerobic bacteria and semen quality among men who are seeking infertility treatment at a tertiary care setting.

Methodology: Male partners of infertile couples who presented for treatment to the professorial unit at the De Soya Hospital for Women were recruited for the study (n=200). Seminal fluid analysis and seminal fluid culture were performed according to the WHO criteria. Mid-stream urine culture was performed on the same day to exclude urinary tract infections. Results were analyzed using Statistical Package for Social Sciences (SPSS) 15.0.

Results: Normal sperm concentration was seen in 69.5% (n=139/193); normal sperm motility was seen in 39.5% (n=79/193); normal sperm morphology was seen in 38% (n=76/179) and normal sperm vitality was seen in 36.5% (n=73/179). Pathogenic organisms were isolated in seminal fluid in 8% of males (n=16/191) with a colony count of more than 10^3 , out of which two also had concomitant urinary tract infections with the same pathogen. Another 7.5% (n=15/191) showed a mixed growth of organisms. Organisms isolated in positive cultures were, *Staphylococcus aureus* in 37.5% (n=6), beta(β) hemolytic Streptococci in 18.8%, (n=3), alpha(α) hemolytic Streptococci in 12.5% (n=2), non-hemolytic Streptococci in 6.3% (n=1) and *Escherichia coli* in 5.9% (n=1). Analysis did not show a significant association between the seminal fluid infections with aerobic organisms and seminal fluid parameters. P values for individual parameters were: concentration (0.465), motility (0.608), morphology (0.869) and viability (0.137).

Conclusion: Infections with aerobic organisms have not shown an effect on seminal fluid parameters.