A-47: Correlation between male accessory gland infection and seminal fluid

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Estimates of the contribution of a male factor towards infertility as a whole is variable. Our own assessment was reported as 26.1%. Most practitioners tend to assess a male factor from semen density alone and overlook the important aspect of sperm motility.

Genital tract infections, particularly in the epididymis and accessory apparatus has not been fully appreciated and there is little data on the microbiology of such infections.

This study was undertaken to identify the organisms in male genital tract infections and their contributory effect towards seminal fluid abnormalities.

A sample of 58 men, investigated for infertility, whose semen showed the presence of more than 10 pus cells per high power field, were studied over a 14 month period. Seminal fluid was cultured on blood agar plates under aerobic conditions for 24 hours. The organisms were identified, subcultured and tested for antibiotic sensitivity.

Of the 58 men, 45 (77.6%) showed significant growth of pathogens. The coomonly identified bacterium was *Staphylococcus aureus*, present in 42 cases (93.3%). Two samples showed coliforms and beta-haemolytic streptococcus was isolated in one case. No growth was evident in 13 samples (22.4%) even after 48 hours of incubation.

The noteworthy seminal fluid anomaly seen in culture positive samples was a lowered sperm motility, 36 out of 45 cases (80%). Abnormalities in sperm density (oligospermia or azoospermia) was not a common feature with accessory gland infection (14 cases).

The bacterium most frequently isolated in association with lowered sperm motility was *Staphylococcus aureus* in 32 cases (71.1%) and coliforms in 03 cases (6.7%).

While *Staph aureus* was reported as sensitive to erythromycin and Dalacin C, in nearly all cases they were resistant to penicillin and ampicillin.

After treatment for a minimum of 60 days, 98% of samples were rendered sterile. Of 32 men with lowered sperm motility whose semen was infected with *Staph aureus*, 28 showed a significant rise in motility (87.5%) and 11 pregnancies (39.3%) were recorded.

The effect of accessory gland infection on male infertility is more likely to be due to a sperm motility disorder rather that a lowered sperm density.