THE IMPACT OF BODY MASS INDEX ON SPERM RECOVERY AND SERUM REPRODUCTIVE HORMONE LEVELS IN NON-OBSTRUCTIVE AZOOSPERMIA

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Introduction: The relationship between metabolic syndrome and health disorders or the decline in male sexual functions is a major topic of discussion; moreover, reports describing a correlation between obesity and sperm count have appeared in the literature. A retrospective study of non-obstructive azoospermia regarding the impact of body mass index on reproductive hormones and potential sperm recovery was conducted.
Materials and Methods: The subject population consisted of 795 infertility outpatients treated in this clinic between April 2000 and March 2010; 445 cases of azoospermia (obstructive azoospermia= OA, 187 cases; non-obstructive azoospermia = NOA, 258) were diagnosed. The 258 NOA patients were enrolled in this study. Additionally, 30 fertile controls were included. Levels of reproductive hormones, triglyceride, HDL-cholesterol and uric acid and BMI were examined.
Results: Total and free testosterone levels displayed obvious elevation in sperm-recoverable groups. Correlations in fat metabolism, uric acid or BMI were not detected between sperm-recoverable and non-recoverable groups.
Conclusion: No relationship was apparent between sperm recovery potential and body mass index. This retrospective study assessed patients at a single facility; thus, future large-scale population-based longitudinal studies are necessary.