

Endocrine, sexual and reproductive functions in patients with Klinefelter Syndrome compared to non-obstructive azoospermic patients.

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Abstract

Aims: We aimed to investigate fertilization rates, quality of embryo, pregnancy and live birth rates, endocrine, sexual function, psychological status and quality of life of cases diagnosed with Klinefelter syndrome (KS). **Methods:** Clinical findings, hormone values and semen analyses in patients with nonmosaic KS (Group 1, n=121) and those with non-genetic nonobstructive azoospermia (NOA) (Group 2, n=178) were retrospectively analyzed. Sperm retrieval outcomes with microdissection testicular sperm extraction (micro-TESE), fertilization rates and embryo quality, pregnancy, abortion, and live birth rates were compared. Sexual functions were assessed using IIEF-15, quality of life was evaluated, and psychological status was assessed. **Results:** There was no difference in terms of age between groups. Sperm retrieval rates was 38% and 55.6% in Group 1 and 2, respectively (p=0.012). Sperm retrieval rates were higher in Group 1 before 31.5 years than in Group 2 (AUC=0.620, 0.578). Compared to Group 2, the fertilization rate was low in Group 1, whereas embryo quality was similar. Live birth rates were 12.5% and 23% in Group 1 and 2, respectively (p=0.392). The education level, libido, erectile functions, and general health satisfaction were lower in Group 1 than in Group 2 (buraya p değeri yaz). Depression and anxiety levels were higher in Group 2 than Group 1 (p değeri yaz). **Conclusion:** Higher sperm retrieval rate has been achieved in group 1 younger than 31.5 years. Similar embryo quality is provided between groups. Sexual dysfunction and psychiatric problems were higher in Group 1, with lower satisfaction and general health than Group 2. Patients with KS should be monitored not only with their reproductive functions but also with their general health status.

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