IBD

PATIENTS WITH CROHN’S DISEASE AND TESTOSTERONE DEFICIENCY (HYPOGONADISM) BENEFIT FROM TREATMENT WITH TESTOSTERONE – DATA FROM AN ONGOING, LONG-TERM, OBSERVATIONAL REGISTRY STUDY

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Background: Anti-inflammatory effects of testosterone (T) have been demonstrated in numerous studies. Methods: Prospective, cumulative, observational registry study, 73 hypogonadal men with Crohn’s disease (n=71) and Colitis ulcerosa (n=2) with T≤12 nmol/L from 2 centers in Germany and Syria received testosterone undecanoate injections on day 1, after 6 weeks and thereafter every 12 weeks for up to 75 months. 12 hypogonadal men with Crohn’s disease not receiving T served as control group. In total, 73 men received T and 12 hypogonadal men remained untreated. Crohn’s Disease Activity Index (CDAI) was assessed every 3 months. Highly sensitive C-reactive protein (hsCRP) and leukocyte count were measured. Results: T levels at baseline were 9.37±1.08 nmol/L in the T group and 10.75±0.36 in the control group. During treatment, T increased to 15.72±0.53 and slightly declined in the control group. CDAI decreased from 231.3±35.96 to 75.0 in the treated group and increased from 196.25±7.11 to 210.0 in the control group. hsCRP (mg/dl) levels at baseline: 14.01±9.18 in the T group, 7.3±0.98 in the control group. They decreased to 2.63±1.91 after 72 months in the T group and increased to 13.7 in controls. Leukocyte count decreased from 12.42±2.46 to 5.97±0.51x10³ cells/µl in the treated group and remained unchanged in controls (from 11.38±1.29 to 12.7). Conclusion: Normalisation of T in hypogonadal men with Crohn’s disease led to improvements of the CDAI, hsCRP, a reduction of leukocytes and an improvement of QoL. The mechanism of this improvement may be through anti-inflammatory and immunosuppressive effects of testosterone.