

## “Late Onset hypogonadism” is not an Isolated Condition – Comorbidities in Elderly Hypogonadal Men Presenting or Referred to Urological Institutions in Germany

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**Introduction:** Serum testosterone declines with aging, not primarily determined by calendar age per se but rather by factors impairing the health of aging men, such as obesity, metabolic syndrome, diabetes mellitus and other diseases. We determined concurrent diseases in two cohorts of mainly elderly men with so-called late onset hypogonadism (LOH).

**Methods:** In two separate cumulative registry studies following identical protocols, two cohorts of 516 mainly elderly men were analyzed for concurrent diseases. Cohort A (Dr. Haider, Bremerhaven, Germany) consisted of 255 men, cohort B (Dr. Yassin, Norderstedt, Germany) of 261 men. These men had either sought urological consultation or had been referred by other disciplines because of suspected hypogonadism. All men received treatment with injections of long-acting testosterone undecanoate.

**Results:** The following comorbidities were encountered:

Cardiology: hypertension: A: 40%, B: 45% ; coronary artery disease: A: 16%, B: 13%; condition post myocardial infarction: A 15%, B: <1%.

Internal Medicine: Diabetes mellitus: A: 31%, B: 26%; dyslipidemia: A: 18%, B: 33%.

Gastroenterology: inflammatory bowel disease: A: 16%, B: <1%.

Urology: chronic prostatitis: A: 38%, B: 11%.

Dermatology: psoriasis: A: 5%, B: <1%.

Endocrinology: Klinefelter's syndrome: A: 9%, B: 2%. In addition, there were a total of 14 patients with a history of maldescensus testis and 19 patients with a history of unilateral or bilateral orchiectomy following testicular cancer.

Orthopedics: osteoporosis: A: 14%, B: 6%.

**Conclusions:** 1) The majority of middle-aged to elderly patients with hypogonadism have one or more comorbidities. For adequate treatment, hypogonadal men should be examined for concurrent diseases. Testosterone administration may be a significant element in their treatment. 2) With progression of their age elderly men will suffer increasingly from ailments and hypogonadism may be an element, so far not often diagnosed. Testosterone treatment may contribute to a better quality treatment. 3) 60/516 men had conditions which cannot be categorized as “LOH”. Klinefelter's syndrome may still have been undiagnosed, and a history of maldescensus testis may be unknown. The term “LOH” should be used with caution, and the general term “hypogonadism” may be preferable.