



## Effects of Qizhen-Ziyin Mixture (QZM) in the Treatment of Late Onset Hypogonadism: A Randomized Controlled Trial

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### Editorial

To evaluate the efficacy and safety of Qizhen-Ziyin Mixture (QZM) compared with Eleven Testosterone Capsule (ETC) in the treatment of Late Onset Hypogonadism (LOH), 152 patients from three hospitals, diagnosed as LOH with Kidney-Yin deficiency, were randomly divided into QZM group and ETC group during the 2-month trial. Before and after 1-month and 2-month treatment, Symptomatic Inventory for Screening Late-Onset Hypogonadism in Males (SILOH) scores, serum testosterone levels and adverse events were measured, respectively. 146 cases completed the trial. The SILOH symptom scores of two groups were significantly different before and after treatment ( $P < 0.05$ ). QZM group was superior to ETC group in the improvement of hot flashes and night sweat symptoms ( $P < 0.05$ ). The improvement of sexual dysfunction in ETC group was better than in the QZM group ( $P < 0.05$ ) among SILOH functional symptoms. Serum testosterone levels between both two groups were increased from the baseline ( $P < 0.05$ ), but the serum testosterone in ETC was higher than that in QZM group ( $P < 0.05$ ). The improvement of BMI between both two groups before and after treatment was not significant ( $P > 0.05$ ). The rate of adverse events in ETC group was 9.6%, while there was no adverse event in QZM group. A significant difference in the incidence of two groups of adverse events was shown ( $P < 0.05$ ). In conclusion, QZM is effective for LOH patients with Kidney-Yin deficiency and the mechanism may be through increasing the serum testosterone. Furthermore, QZM is much safer than testosterone. Our results suggested that QZM therapy is better than testosterone replacement therapy for LOH.

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