



INTERPRETATION OF RESULTS

- Since this is the first time to use nano water in patients with LUTS, then there is little data to compare the results with.
- In group A (NTT), the patients had better results and this is due to the Nano water that has less surface tension and different physical properties than the ordinary water and this ads new biological effects that can change the response of the lower urinary tract and improves the results of conservative treatment when given with tadalafil and tamsulocin.
- It also improved the IPSS scores of the BPH patients and improved the erectile function in those patients as it showed similar results in erectile dysfunction (ED) and improved testosterone results in other clinical studies.

CONCLUSIONS

- The combination of nanotechnology structured water (Magnalife) with tadalafil 5mg and tamsulocin 0.4 mg gives a better result in terms of LUTS and scores in patients with BPH.
- This combination is showing improvements in IPSS and even in erectile function in those men. So in the time that this combination may decrease the need for surgery in those patients, it improves the erectile function within three months.
- Further studies are needed to see the long term effects of this combination and to test the effects of Nanotechnology water in other fields of urology.

ABSTRACT

- Lower urinary tract symptoms (LUTS) is a common complaint among men with benign prostatic hyperplasia (BPH).
- Recently the combination of tadalafil and tamsulocin has been used for the treatment of male LUTS associated with (BPH).
- Nanotechnology structured water magnalife is a new type of water that is produced by modulators and specific frequency and energy fields that transform the ordinary water into this Nano-water.
- In this study, we wanted to test the combination of Nano-water (Magnalife) with tadalafil 5mg and tamsulocin 0.4mg in patients with LUTS/BPH and to see if it gives better results.

METHODS

- For a period of 3 months, 200 men with International Prostate Symptom Score (IPSS) ≥ 13 , maximum flow rate (Qmax) ≤ 15 ml/s and prostate volume >30 and <80 cc were randomly divided into two groups.
- Group A 100 men given combination of (nano water-tadalafil-tamsulocin) (NTT) and group B 100 men given combination of (ordinary bottled water-tadalafil-tamsulocin) (OTT).
- The water bottles were unlabeled and were given in a daily dose of 20ml/kg body weight. Tadalafil 5mg and tamsulocin 0.4 mg daily doses.
- Both groups were evaluated for the IPSS, Qmax, Residual Urine (RU), International Index of Erectile Function-Erectile Function (IIEF-EF) domain at the beginning (baseline data), also those parameters were assessed at the end of the 3 months.

RESULTS

- Of the 200 men with LUTS who were included in this study, 193 men were followed, 7 men dropped out of the study for different reasons.
- In group A (NTT) which included 97 men with LUTS, IPSS decreased by 16.82 (from 20.47 to 6.65) ($P < 0.00001$) and Qmax increased by 5.73 ml/s (from 11.71 to 17.44) ($P < 0.00001$) and RU < 50 ml in 88% of patients ($P < 0.00001$) and IIEF-EF increased to 26.65 (from 16.85) ($P < 0.00001$).
- While in group B, 96 men with LUTS who used the combination of (OTT). IPSS decreased by 8.74 (from 19.59 to 10.85) ($P < 0.00001$) and Qmax increased by 4.67 ml/s (from 10.74 to 15.41) ($P < 0.00001$), RU < 50 ml in 75% of patients ($P < 0.00001$), and IIEF-EF increased to 21 (from 15.87) ($P < 0.00001$).
- Group A had better results than group B. IPSS in group A decreased to 6.65 vs 10.85 in group B ($P < 0.00001$), also Qmax increased to 17.44 in group A vs 15.41 in group B ($P < 0.00001$), group A had RU < 50 ml in 88% of patients vs 75% of patients in group B ($P < 0.00001$). Group A had better IIEF-EF which increased to 26.65 vs 21 in group B ($P < 0.00001$).
- While the differences between the baseline data of both groups were statistically not significant.