Evaluation of the efficacy of once-daily use of tadalafil vs. on-demand use. Is there a cumulative effect?

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Abstract

OBJECTIVE: To assess and compare the efficacy of on-demand versus daily dosages of tadalafil in the treatment of erectile dysfunction.

METHODS: The case-control double-blind study was conducted at the Department of Urology, Tehran University of Medical Science, Imam Khomeini Hospital, from March 2008 to January 2010. It comprised 100 males suffering from erectile dysfunction who were randomised into two groups; one receiving on-demand tadalafil (10mg), and the other receiving once-daily dose of tadalafil (10mg). The erectile function domain of the International Index of Erectile Function was evaluated initially at the baseline and then at 24 weeks after treatment. To evaluate the possible cumulative effect of tadalafil, the index was measured in the group taking daily tadalafil at 12 weeks after the initiation of the treatment. SPSS 13 was used for statistical analysis.

RESULTS: The study showed significant improvement in the mean erectile function domain measured after 24 weeks in both daily (17.08+/−3.896 vs baseline 12.64+/−2.92; p<0.001) and on-demand (15.46+/−3.64 vs baseline 13.48+/−2.86; p<0.001) groups. Data showed significant difference in mean scores between on-demand and daily groups (p = 0.03). In daily group, the mean domain measured at the 24th week showed significant improvement compared to the mean score of the 12th week (p <0.001).

CONCLUSION: Treatment with daily tadalafil was associated with a significantly higher erectile function domain score compared to the on-demand use. The significant difference between mean scores of 12th week and 24th week in the daily group points towards the possible cumulative effect of tadalafil.

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