Terazosin reduced BPH symptoms and finasteride did not


Objective

to determine whether terazosin, finasteride, or both are safe and effective for men with benign prostatic hyperplasia (BPH).

Design

1-year, randomized, double-blind, placebo-controlled trial.

Setting

U.S. Veterans Affairs medical centers.

Patients

1299 men who were 40 to 80 years old (mean age 65 y) and had symptomatic BPH. Inclusion criteria were scores of ≥ 8 on the American Urological Association (AUA) Symptom Index, a mean peak urinary-flow rate of < 15 mL/s, and a minimal residual volume after voiding of < 125 mL. Exclusion criteria were use of many medications, including the study drugs, α-blockers, β-blockers, and antidiabetic drugs, or numerous medical conditions.

Intervention

After a 4-week run-in period, men were allocated to placebo (n = 305); finasteride, 5 mg/d at bedtime (n = 310); terazosin, 0.5 mg/d or 1 mg/d (n = 310); or both (n = 309). The terazosin dose was titrated from 1 mg at day 1 to 15 mg by day 15. Follow-up was 87%.

Main outcome measures

AUA symptom scores and peak urinary-flow rates.

Main results

Analysis was by intent to treat. Compliance ranged from 94% to 98% at 1 year, and symptom scores were lower (improved) in the terazosin and the combination groups compared with the finasteride and placebo groups (P < 0.001 for all comparisons except terazosin vs combination, P = 0.15, and finasteride vs placebo, P = 0.07). The improvements increased consistently over week 4, and the rates stayed stable thereafter. Dizziness and postural hypotheness were increased in the terazosin and combination groups (P < 0.001), impotence increased in the combination and control groups (P < 0.001), increased libido occurred in the finasteride and combination groups (P = 0.05).

Conclusions

Terazosin was more effective than placebo for reducing symptoms and increasing peak urinary-flow rates in men with benign prostatic hyperplasia. The combination of terazosin and finasteride was no more effective than terazosin alone.

Combination therapy was better than zidovudine alone for HIV infection


Objective

To determine whether zidovudine combined with didanosine (ddI) or zalcitabine (ddC) is more effective than zidovudine alone for reducing mortality and disease progression in patients with HIV infection.

Design

Randomized, double-blind, controlled trial with interim analyses.

Setting

175 centers in Europe and Australia.

Patients

2075 adults (mean age 36.5 y, 85% men) with confirmed HIV infection who had not received zidovudine-based therapy. Patients were allocated to zidovudine (n = 2124) or had taken it previously (n = 330), had a CD4 cell count of < 500/mm^3, no or minimal symptoms of HIV infection, and were not men who have sex with men, drug users, or patients with severe non-AIDS medical conditions.

Intervention

Patients were allocated to zidovudine alone, ddI/zidovudine (n = 1055; previous zidovudine use, n = 778; previous use, n = 326; and zidovudine and ddI, 2.25 mg/d [n = 1072]; no previous zidovudine use, n = 776; previous use, n = 366). Therapy was changed using a defined protocol if disease progressed or serious adverse events occurred.

Main outcome measures

Death and, in patients who did not die, progression to AIDS or death.

Main results

The study was stopped early. After a median follow-up of 30 months, 74% of the patients had stopped blinded trial treatment, 699 patients (22%) had died, and 936 of 2765 (34%) who were free of AIDS at enrollment had either developed AIDS or died. Integrity-to-treatment analyses were done. Overall, both drug combinations improved survival when compared with zidovudine alone.

Commentary

Drug treatment is an attractive alternative to surgery for patients with symptoms of BPH. Several clinical trials have shown that long-acting α1-adrenergic blockers and finasteride, a 5α-reductase inhibitor, are modestly effective in relieving symptoms of BPH. In this randomized controlled trial, Lepor and colleagues compared the α1-adrenergic blocking agent terazosin with finasteride alone, a terazosin-finasteride combination, and placebo. The study appears to be valid. Patients and providers were blinded to treatment allocations, and the baseline characteristics of all 4 groups were similar, compliance was excellent, and losses to follow-up occurred throughout the 1-year study, and the patients were analyzed in the groups to which they were assigned (intention-to-treat analysis). The outcomes (symptom scores and urinary-flow rates) are clinically relevant, both would have been helpful if the authors had included information on improvement in residual volumes after voiding, which can also be assessed in an office practice. The improvements seen with terazosin alone were modest, but finasteride was no better than placebo in relieving symptoms or increasing urinary-flow rates. With the exception of dizziness and postural hypotension, the side effects of terazosin were mild. Men receiving finasteride were more likely to report sexual dysfunction. A global assessment would have been helpful in showing whether patients considered the benefits of the treatment to outweigh the side effects. Random variation could easily explain the apparent discrepancy between the lack of benefit from finasteride in this study and the small improvement in symptoms and urinary-flow rates seen among men receiving finasteride in the multicenter study reported in 1992. (1) Our approach is to start men with symptomatic BPH therapy with an α1-blocker. We recommend surgery instead of adding finasteride or other α1-blockers if our patients’ symptoms and residual volumes after voiding are not sufficient (≥ 50 mL) to alter a single-agent therapy.

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Reference


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