

## Microwave treatments for enlarged prostate cause blood pressure surges

April 8 2008

---

Many men who receive microwave therapy for enlarged prostates experience significant surges in blood pressure that could raise their risk of a heart attack or stroke, according to new research findings published recently in *Mayo Clinic Proceedings*.

The Mayo Clinic-led study of 185 consecutive patients who received transurethral microwave therapy at four medical centers found that 42 percent experienced systolic blood pressure surges of more than 30 mm Hg, while 5 percent had surges of more than 70 mm Hg.

“Men who are candidates for this minimally invasive microwave therapy tend also to be at higher risk for cardiac events,” says Lance Mynderse, M.D., the Mayo Clinic urologist who authored the study. “Blood pressure surges of the magnitude identified in this study are troubling side effects of treatment that need to be monitored and managed.”

Benign prostatic hyperplasia (BPH), or an enlarged prostate gland, is a condition affecting half of men over age 50 and 80 percent of those over 70. Symptoms include difficult urination, sudden urges to urinate and inability to empty the bladder. BPH often is treated with medication and in severe cases open surgery may be necessary, but since 1997 transurethral microwave therapy has been a less-invasive option.

Transurethral microwave therapy involves using a catheter to place a microwave device within the prostate, which is then heated to destroy excess tissue. Approximately 70,000 such procedures are performed

each year, usually in an office setting and typically involving patients from 50 to 85 years old.

“This patient population is at high risk of cardiovascular disease,” explains Benjamin Larson, a medical student at Cleveland Clinic who is the lead author of the Mayo Clinic Proceedings paper. “Anecdotal reports of adverse blood pressure events during and after transurethral microwave therapy, and our own experience, led us to look back at the records to identify potential problems among these patients whose blood pressure had been monitored.”

The authors say the study findings should not necessarily deter physicians and their patients from using one of the six FDA-approved devices for transurethral microwave therapy, but they should take reasonable precautions given the strong possibility of blood pressure surges. “Blood pressure monitoring should be a standard part of the procedure. Blood pressure readings should be taken throughout the procedure, multiple times. Unfortunately, that has not always been the practice for this office-based therapy,” Dr. Mynderse explains. “Monitoring will enable physicians to identify the problem and adjust treatment. Patients also should be encouraged to continue their anti-hypertensive medications, particularly beta blockers, as they prepare for the procedure.”

Source: Mayo Clinic

Citation: Microwave treatments for enlarged prostate cause blood pressure surges (2008, April 8) retrieved 5 July 2023 from <https://medicalxpress.com/news/2008-04-microwave-treatments-enlarged-prostate-blood.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.