

NEWS

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*****New diagnostic and treatment techniques may cure secondary hypertension.

NOTE: May is Hypertension Awareness Month, sponsored by the National High Blood Pressure Education Program of the National Institutes of Health.

DALLAS -- Some patients with high blood pressure can be cured.

About five percent of the people with hypertension have secondary hypertension, says Dr. C. Venkata S. Ram, clinical associate professor of Internal Medicine at The University of Texas Health Science Center at Dallas. This means their hypertension is a result of some other condition.

There are around 50 million people with high blood pressure in the U.S. So about two and one-half million have the secondary form. The most common cause of secondary hypertension in this country is probably oral contraceptive use, says Ram. After that renal disease including renal artery stenosis and tumors of the adrenal gland are the most common.

In the past, says Ram, physicians have been reluctant to test for an underlying cause of high blood pressure because the vast majority of patients have the "essential" variety, that is, with no known cause. But now, says the hypertension expert, with new, safer diagnostic and treatment techniques, physicians should assess each patient on an individual basis.

"Special work-ups to find a secondary cause are indicated only under certain circumstances. And not everyone with high blood pressure needs these investigations, which are expensive and exhaustive, indeed," explains Ram. "The need to look for an underlying cause is largely dictated by clinical assessment and by following the course of high blood pressure.

"Unless the physician follows the clinical course carefully, he or she can miss secondary hypertension, which might be cured," says Ram. Patients in whom he considers a secondary cause include those:

- who experience rapid damage to the blood vessels in the heart, brain or kidney;
- with drug-resistant high blood pressure;
- with unexplained symptoms such as weight loss, heart palpitations, blood in the urine, low blood potassium, high blood calcium or kidney failure;
- with a family history of tumors of the thyroid or adrenal gland;
- with hypertension beginning before the age of 30 or after the age of 55.

If a patient is suspected of renal artery stenosis (narrowing of the artery to the kidney), there are new diagnostic and treatment techniques available.

Most major medical centers have digital subtraction angiography (DSA), which makes it possible to detect renal artery stenosis with intravenous injection of a special dye. Images showing the blood flow before and after the injection are made with special X-ray TV equipment. A computer then compares the two images and creates a subtraction image.

The major advantage of DSA is that a diagnosis can be made without an arterial

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injection and catheterization. The disadvantage is that the technique is only 90 percent accurate. That is, 10 percent of the patients with the disease are missed. So a negative DSA necessitates a renal arteriogram to rule out the disease. But for the majority of patients the DSA can result in a diagnosis.

Those patients diagnosed with renal artery stenosis may be offered a new alternative to surgery or drug therapy -- "balloon dilation" or percutaneous transluminal angioplasty (PTA). The "balloon" is positioned at the narrowing of the artery and inflated for about 10 seconds and then deflated. More inflations may sometimes be required to open the blocked artery.

Advantages of this technique are that the patient needs only a local anesthetic and is hospitalized only over-night. The major disadvantage is that the long-term results are uncertain as yet.

If the cause of secondary hypertension is an adrenal tumor, it can be diagnosed non-invasively by CT scan or, if necessary, by X-ray filming of injected dye. These tumors are treated surgically if possible or by specific drug therapy.

"In 1984 we have come a long way in accurately diagnosing the secondary forms of hypertension," says Ram. "Why is it necessary to diagnose secondary forms of hypertension? Because hypertension in these patients can sometimes be cured or at least, it can be treated in a specific manner in contrast to therapy of essential hypertension, which is largely empiric at the present time."

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