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Presented by Dr. Wayne Olsheski, General Practitioner, and the University of Toronto

Answers to your questions from University of Toronto experts

Migraines

Does Botulinum Toxin Help Manage Migraines?

Botulinum toxin acts by denervating skeletal muscles. Because of this, it has been used to alleviate conditions characterized by muscle overactivity or spasm. Its current treatment indications are in strabismus, blepharospasm, torticollis and cerebral palsy. It is used in many other areas, including the eradication of wrinkles, which led to the observation that, in some patients, headaches improved after frontalis injections.

There have been studies using botulinum toxin type A to treat both migraine and tension-type headaches (TTH).[1,2] In the migraine study, injecting patients' frontalis muscles with 25 international units (IU) of botulinum toxin type A, in divided doses, was associated with a significant reduction in headache frequency, at days 31 to 90, as compared to injections of a placebo. A 75-IU dose was also effective, but carried the penalty of more adverse events.

The TTH study measured patients' responses to injections of four equal doses of 25 IU into

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the frontal, temporal, occipital and sternomastoid muscles. Their headaches improved by about 50% after four weeks of treatment.

These studies are exciting, but much more has to be done before the place of botulinum toxin type A can be assessed in the management of migraines and TTH headaches. At the present time, physicians should not offer this treatment indiscriminatively, but it could be reserved for patients resistant to, or intolerant to, conventional therapy.

References

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Hypertension

Can hypertensive therapy be discontinued? Can hypertension be cured?

Patients with hypertension secondary to renal artery stenosis or adrenal causes may be cured by intervention, but patients with essential hypertension are never cured. Their blood pressure may be controlled, but whatever factors are responsible for the hypertensive state remain present life-long.

Lifestyle changes involving increased rhythmic exercise and sodium and weight reduction sometimes will reduce blood pressure to a point that antihypertensive agents might be reduced. The trial of non-pharmacologic interventions in the elderly (TONE) study provides a good example of this in elderly patients. The study examined hypertensive patients aged 60 to 80 years with blood pressure (BP) <145/85 mmHg, and on a single antihypertensive agent.[1] Over a median followup of 29 months, more patients were able to reduce, or stop taking, their medication if they had reduced their sodium intake. Obese patients who reduced their weight also could reduce, or stop taking, medication.

Although the author applauds the intention to reduce or eliminate drug therapy when possible, the adherence to lifestyle change is very limited, and the unknown factors that cause hypertension continue to be present, and may become more prominent with increasing age. This is particularly true of post-menopausal women, who can have a marked increase in systolic blood pres-

sure over the three decades following menopause. Believing that they have been cured of their hypertension, these individuals could have increased morbidity and mortality when they are without adequate treatment. There is increasing emphasis on the adverse prognosis of increased systolic pressure above 130 mmHg when diastolic pressures are low.[2] Future trials may demonstrate that borderline or mild increases in systolic blood pressure should be treated. Diabetic patients, or renal patients with proteinuria, are being treated already at these BP levels.

Eliminating antihypertensive drug treatment at an earlier stage in life may adversely alter prognosis. There are no long-term follow-up studies to demonstrate a benefit to stopping therapy. CME

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