## TREATING HYPERTENSION

Aware physicians are much more conservative about when to directly treat blood pressure. They tend to focus on reversing the causes of high blood pressure, rather than trying to treat it with medications. Nonetheless, there are still cases where treating hypertension has merit.

Given the pivotal role of poor zeta potential in hypertension, it makes sense that providing zeta aid often causes a dramatic improvement in a person's blood pressure. More potassium and magnesium in the diet—partially switching from sodium chloride (NaCl) to potassium chloride (KCl) when salting foods—can also be helpful. A major problem with the war against sodium is that it ignores the vital importance of sufficient chloride.

If we view most hypertension as being a disease of the arteries, there are a few different ways to restore their pliability and health. First, weakened and inflexible blood vessels can be the result of nutritional deficiencies—most commonly, not enough manganese or zinc, in both cases, we use Manganese and B<sub>12</sub> taken every other day or Zinc Chelate taken daily to effectively strengthen the blood vessels. In many other cases, the issue is a magnesium deficiency; magnesium allows blood vessels to relax, which makes it one of the most well-known natural blood-pressure therapies.

Second, certain regions of the body are very sensitive to poor blood flow, and in some cases, this results not from an issue within the vessel, but rather from an external compression. A kidney being out of place and thus constricting a renal artery causes high blood pressure; moving it back into its correct position normalizes blood pressure. Visceral body workers have had success with this approach for hypertension, and it is specifically detailed in the primary textbook on the subject, *Visceral Manipulation*. Carotid arteries can also have structural issues because they contain the baroceptors that monitor blood pressure.

Third, damage to the arteries (which then causes clots to form) is the root cause of cardiovascular disease. If inflammation is a primary source of arterial damage, it makes sense to focus on doing whatever we can to reduce it, such as eliminating chronic infections or addressing inflammatory components of the diet.

Fourth, addressing any anxiety or excessive stress component of the condition can provide dramatic benefits. Although the approach will necessarily be patient specific, in many cases, simple relaxation exercises (such as deep abdominal breathing through the nose) can help increase parasympathetic tone and relax the nervous system.

In most severe cases, simple lifestyle measures will eliminate high blood pressure and also address many of the underlying problems giving rise to heart disease in the first place. Such measures include getting out in the sun, fixing one's sleep cycle, exercising, regularly practicing a relaxation technique and cleaning up the diet to reduce insulin resistance and high blood sugar and increase potassium and magnesium. Improving one will also often improve the others.

Other things to treat blood pressure include:

Enhanced External Counter Pulsation (EECP) therapy: This is a method of rhythmically increasing the
return of blood to the heart, which results in new blood vessels forming, the functions of organs such
as the heart, brain, and kidneys significantly improving and the blood vessels being much more able
to do their normal functions (vasodilate). We often observe that EECP improves BP. However, in

patients who have significant vascular compromise, EECP initially needs to be very gently; otherwise, patients can't tolerate it.

- EDTA chelation therapy: This approach repairs arteries (by removing calcification) and improves the physiologic zeta potential. It should be an aluminum-free form and a low dose.
- Ultraviolet blood irradiation (UVBI): UVBI often provides immense benefits to the cardiovascular system and may significantly reduce blood pressure.

A continual topic of debate has to do with the threshold at which blood pressure management should be started. We all agree that "excessively high" blood pressure should e treated, but exactly what constitutes that threshold varies greatly from patient to patient. There are no clear thresholds to indicate which patients need something to be done about their blood pressure and which don't. For example, if someone in their twenties has a blood pressure over 160, we probably would view that as an issue that needs to be addressed for their long-term health, whereas in an older patient, we would leave that same pressure alone.

Most often, finding the cause or using a natural method will be enough, but if patients are not willing to make the lifestyle changes, a third option is medication. When blood pressure medications are used, there are a few general rules.

First, view blood pressure medications as adjunctive treatments rather than the primary strategy. Second, start with a lower dose.

Third, evaluate one drug at a time to see how the patient responds rather than stacking numerous ones on to lower the blood pressure incrementally. (Typically, ACE inhibitors are the best tolerated, but some patients still have issues with them.)

In addition, the specific medication needs to be matched to the patient's situation. Some patients will have a specific medical illness that requires a specific antihypertensive (such as a calcium channel blocker for a heart arrhythmia), and that drug can also be used as their hypertension medication.

Phosphodiesterase (PDE) inhibitors are the safest and most effective blood pressure medications because they work by increasing nitric oxide. However, there are also issues with those drugs, so a lot of thought needs to go into their use. This class of drugs originally was developed to lower blood pressure but then was shunted to erectile dysfunction (a much more lucrative market). Most allopathic doctors will not be familiar with this application because they aren't typically used to treat blood pressure.

Given that measuring and documenting blood pressure is one of the most routine procedures administered during a medical visit, the perspective shared here may seem like a controversial position to take. So, make your own determination.