

# sounding board



## “Doctor, my legs are swelling”

Thomas G. Pelz, DO

One of the most frequent reasons a physician is consulted by a patient is for leg swelling. The expected response from the physician is a prescription for a diuretic, such as hydrochlorothiazide or furosemide. Unfortunately, our society expects that a pill will cure their problem. All too often, the desired solution has untoward outcomes. I find it interesting that the person seeking the pill solution to this problem will ignore all of the published side effects of the diuretic but will usually demand to be informed what the complications are for a medication that they need for another problem.

My practice is primarily hospital-based; that is, the majority of my patients are inpatients. All too often I find that I am trying to diagnose and then correct the medical complications of patients' bad habits. Often complications of diuretics are a major source of the patient's reason for admission. Problems include but are not limited to hyponatremia, hypercalcemia, hypokalemia, hyperlipidemia, muscle cramps, headaches, vertigo, and hyperglycemia.

The problems created by diuretics are not minor; otherwise, the patient would not be admitted. During the past year, I have managed a serum calcium of 14, which was almost entirely secondary to a patient's use of a diuretic to manage her leg edema. Another admission involved a patient with a potassium of 2.1. Not surprisingly, this patient also had numerous arrhythmias. The overlooked aspect of this situation is that determining the etiology of these problems requires time and considerable expense.

There is a large and varied list of sources regarding the evaluation of the etiology and the therapy of swollen legs. Google Scholar listed more than 15,000 citations published since 2010, when “swollen legs” is searched. When I searched “swollen legs

and diuretics” since 2010, I found more than 500 citations. The citations deal with swollen legs that occurred secondary to complications of numerous serious co-morbid medical conditions.

The patients I am discussing now had no such co-morbidities. They only wanted an easy fix for the swelling that was occurring in their legs. They did not want to change their lifestyle or bad habits. They wanted a quick and easy solution to their problem. My suggested solution requires the patient to change many of his/her current habits. I have found that my suggested changes are greeted with great reluctance on the part of the patient.

The first step I suggest is that they wear support hose. Sources for these include the Jobst stockings ([jobst-usa.com](http://jobst-usa.com)) and Thera wear ([therawear.com](http://therawear.com)). I usually recommend that the patient use the “moderate” compression (20 - 30 mmHg) hose. This is greeted with, “They are too hard to put on.” Or “They make my legs look horrible.”

My second recommendation is the reduction in the amount of salt used by the patient. This is likewise greeted with derision.

The third recommendation involves limiting the patient's fluid intake to less than sixty ounces per day. This is the life style change that most patients are reluctant to alter. Most patients tell me that they have been consuming the recommended eight glasses of water a day in addition to their coffee, soda pop, and alcoholic beverages, which they have been using for years.

When I discuss my recommendations with the patient, I have found that it is best if I sit down with the patient and another person in the room. I leave my sixteen ounce cup of coffee at the nurse's station. I then discuss the complications of the diuretics they were using which have resulted in their hospitalization.

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Unfortunately, in the practice of medicine, it is often easier to acquiesce to the patient's wishes. It takes considerable time to explain why such an easy solution, such as a simple water pill, is the worst choice. In my experience it is even more difficult, and usually impossible, for the physician to convince the patient to change his/her life style or bad habits. The only positive thought in this whole process is that there is a billing code which permits the physician to bill for the length of time spent with a patient.

When billing for this situation, it is important that the physician include in his/her dictation the amount of time spent with the patient and to include the phrase ". . . more than 50% of the time with the patient was spent counseling and coordinating the patient's health care problems." It also helps to list the topics covered during the office visit, so that you can review them with the patient when you see them next.

How successful is this therapy for swollen legs? I would like to think that my success rate is more than 70%. However, since most of the people I manage in the hospital return to their primary care physician, it is difficult to determine if the patient is continuing to be compliant with the discharge instructions.

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## References

The following references are but a few of the articles that discuss the complications of diuretics use. Google Scholar ([scholar.google.com](http://scholar.google.com)) was the search engine.

Entering complications of diuretics use resulted in more than 60,000 possible references.

Messerli FH, Bangalore S, Julius S. Risk Benefit Assessment of  $\beta$ -Blockers and Diuretics Precludes Their Use for First-Line Therapy in Hypertension. *Circulation*. 2008;117:2706-2715.

Kaplan NM. Problems with the use of diuretics in the treatment of hypertension. *Am J Nephrol*. 1986;6(1):1-5.

Greenberg A. Diuretic Complications. *American Journal of the Medical Sciences*. January 2000;319 (1):10.