

USING URINE DIPSTICKS TO DETECT WEGENER'S GRANULOMATOSIS

© Copyright 1995-2005 The Cleveland Clinic Foundation. All rights reserved

<http://www.clevelandclinic.org/health/health-info/docs/3100/3158.asp?index=10971>

Wegener's granulomatosis (WG) can affect the kidneys in 50%-80% of patients. The first sign of kidney involvement is the presence of blood and/or protein in the urine. In medicine, early detection of any problem is preferred. In the case of WG and the kidney, early aspects of injury are most likely to respond to treatment. Not detecting the first signs of kidney inflammation may lead to unrecognized and unnecessary kidney failure.

The blood test, serum creatinine, is a measure of kidney function. A rising value indicates that the kidney has already experienced significant injury. Before the serum creatinine rises, the first sign of injury is the presence of microscopic amounts of blood or protein in the urine. This is usually not seen by the naked eye. Detection of this early sign of kidney involvement is determined by a simple device called a "urine dipstick". Urine dipsticks are available in many drug stores over-the-counter.

If a patient has never had blood or protein in their urine, finding it for the first time would be an important sign of early kidney involvement. Hopefully such an early finding would be made before the serum creatinine started to increase.

It is not practical for a patient to see their doctor frequently to merely have a urinalysis performed by urine dipstick or for the doctor to frequently look at the urine under the microscope. It is practical for patients who have never had blood or protein in their urine, to personally perform the urine dipstick test about once every one to two weeks.

A positive test for blood or protein should lead to an immediate phone call to the doctor. The doctor would then confirm the test as being positive or refute the results by finding that there may have been an error in reading or interpreting the results.

If an abnormal result is confirmed, the physician would then look at the urine under the microscope to see if there were other characteristics that would suggest kidney inflammation. Serum creatinine would be obtained to assess whether some degree of kidney failure had already occurred.

For patients who have already have kidney disease, effective treatment may lead to improvement of kidney function, but blood and protein in the urine might persist for as long as a year and in some patients even longer. In this setting, the urine dipstick test by the individual patient is not very helpful.

For patients who have previously had kidney involvement and have subsequently done well, and the urine is now back to normal, the urine dipstick can be used as a tool to tell you whether kidney involvement has recurred.

Patients and doctors should know that there are many different causes of blood in the urine. Some examples include: urinary tract infection, kidney stones, or bleeding from a kidney cyst. None of these issues would be related to WG and each would require a different approach than that provided for WG. In brief, a dip stick test of the urine can be an extremely helpful diagnostic test, performed by the patient, to assist in ensuring the best possible care.