

MEDICINE

Diagnosis for Arthritis

New techniques for diagnosing arthritis and other rheumatic diseases will make possible earlier treatment of these crippling diseases and improve chances for recovery.

► A FAST and simple test for diagnosing rheumatoid arthritis that spots 80% of cases and gives only a negligible amount of false-positive reactions has been reported by Drs. Joseph J. Bunim, John Bozicevich and Jules Freund of the National Institutes of Health, Bethesda, Md.

The new test, called the Bentonite Flocculation Test (BFT) was described to arthritis specialists at the Ninth International Congress on Rheumatic Diseases meeting in Toronto, Canada.

The test is as accurate as the best of those now used and has the added practical advantage of giving results in 20 minutes instead of the few days that are needed now.

The heart of the test material is a type of colloidal clay known as Bentonite which is widely used commercially for such varied purposes as clarifying wine and beer, plugging up water leaks, and binding together coal dust and charcoal for briquettes.

In making the diagnosis a small amount of the clay is mixed with normal human gamma globulin and to this is added a drop of blood serum from the person being tested.

If the test is positive, that is, if the person has arthritis, then the Bentonite particles will clump together or flocculate within a few minutes. The tiny clump must be detected under a microscope but there is a sharp difference between normal and abnormal values.

In preliminary trials on both known cases of rheumatoid arthritis and persons with other types of rheumatic disease, the test was able to detect eight out of 10 cases of the former and to yield false positives in less than two out of 100 cases of the latter.

These are preliminary findings and must be confirmed, Dr. Bunim emphasized.

The test is based on the well-established principle that the serum of patients with active, rheumatoid arthritis contains a "rheumatoid factor" which causes sensitized particles to stick together.

Spinal Cord Disease

► AN INFLAMED EYE may indicate the presence of ankylosing spondylitis, a spinal cord disease that eventually freezes the backbone in a solid line, Dr. Frantisek Lench, Prague, Czechoslovakia, reported to the rheumatic diseases conference.

The eye inflammation, iritis, involves the iris of the eye and is marked by pain, contraction of the pupil, and discoloration.

"Every case of iritis of unknown origin must be regarded as highly suspect of the crippling rheumatic disease of the spine until proved otherwise," Dr. Lench said.

Out of 625 cases of definitely proved ankylosing spondylitis, over 28% had iritis

associated with their spinal disease. This is too large a percentage to be due only to chance, he added.

Ankylosing spondylitis is predominantly a disease of young males and strikes 10 men for every woman afflicted. The spinal ligament becomes calcified and encloses the entire spinal column in a bony encasement.

Among the more than 400 patients who complained of iritis, 91 were found to have the spinal disease at the same time.

The spinal involvement in these cases was either too slight to notice at all, or the symptoms were so insignificant that the patient paid no attention to them. Also, the pain may have been so intermittent that neither the patient nor the doctor suspected any relationship between the eye inflammation and the back pains, Dr. Lench explained.

Aspirin for Arthritis

► ASPIRIN is still as good as modern-day cortisone for treating arthritis, Drs. Frank D. Hart and E. G. L. Bywaters of London, England, reported to the Congress.

The aspirin-cortisone study was carried on for three years at nine medical centers in Great Britain and included 100 rheumatoid arthritics, half of whom were treated with aspirin while the other half received cortisone. The end results showed no striking difference between the two groups of patients.

Each of the individual arthritics was examined at various intervals during the three-year period and evaluated as to employment status, ability to function, spread of the disease and any biochemical or X-ray changes that could be observed.

All of these examinations showed the only real difference between the two groups was in the patient's own evaluation of his well being. Even here the differences were slight and in most instances the groups were "remarkably" similar.

The cortisone dosage was tailored to the individual and was always the smallest amount that would bring relief. The aspirin-treated group received four grains a day, or slightly less than the standard five grain tablet, he said.

All of the arthritics studied were between 17 and 60 years old and were selected as being responsive to long-term treatment. Both groups were treated with a basic course of general care including the use of splints and physiotherapy.

"We concluded that a basic regime of general care together with either aspirin or cortisone produces very similar results," Dr. Hart said.

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Cure Aches by Taking Up Muscle Slack

► FIBROSITIS, a controversial disease that usually goes hand in hand with arthritis, causing muscular aches, pains and stiffness, can be cured by taking up slack in muscles that have become too long, Dr. Richard T. Smith, Benjamin Franklin Clinic, Philadelphia, reported to the American Therapeutic Society meeting in New York.

Fibrositis is thought to be an inflammation of the fibrous tissues of the body, but to date no evidence supports this idea, Dr. Smith reported.

The aching and pain are in the muscle, he said, and the cause is unquestionably muscle that has become weaker.

The muscle becomes weak because it no longer gets the use it once did. When this happens it becomes elongated and flabby and loses the slight tenseness or "tone" which it normally had. Thus the joints are not held together as tightly as they should be, and the situation gives rise to easy fatigue and soreness, especially after inactivity.

Taking up the muscle slack is the way to treat fibrositis, Dr. Smith believes, and he does this by what he calls "regular rehabilitation."

This is a home program of daily and sometimes hourly exercises designed to rebuild the muscles by usage.

This type of rehabilitation should not be confused with physical therapy treatments, Dr. Smith noted.

It has to be regular exercise over and above what the person gets every day.

Arthritics could benefit greatly from this rehabilitation since most of them suffer from fibrositis. In some cases, it is even possible to stop rheumatoid arthritis and still have the symptoms of fibrositis, so the two should be treated separately, he said.

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Synthetic Codeine Is Non-Habit-Forming

► A SYNTHETIC pain killer that can replace codeine, is non-habit-forming, and creates fewer upset stomachs and other side effects is reported by Dr. Charles M. Gruber Jr. of Indianapolis General Hospital, Indianapolis, Ind., in the *Journal of the American Medical Association* (June 29).

The new codeine substitute is chemically named dextro propoxyphene hydrochloride. It was tested in 101 patients who had chronic pain from such conditions as arthritis, cancer, broken bones and varicose ulcers.

Over a two-year test period, no patients showed a desire for, or need of, increased dosage.

The synthetic also did not cause the nausea, vomiting and abdominal pain that many times accompany an oral dose of codeine. It does, however, cause the same central nervous system side effects such as dizziness, headaches and nervousness.

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