

# medical sciences

## DIABETES

### Early treatment avoids complications

Treatment with oral drugs during the earliest stages of diabetes mellitus has shown promise against disturbances of eyes, kidneys and blood vessels.

At the First International Symposium on Early Diabetes held recently at Marbella, Spain, Dr. Rafael Camerini-Davalos of the Diabetes Center in the New York Medical College said these disturbances could be attacked "long before they wreak their disabling effects."

Dr. Camerini, who was the organizer of the symposium, called attention to studies at Bedford, England, which revealed that even when the treatment did not improve the blood sugar level, it resulted in an improved vascular picture.

The least dangerous and shortest acting oral drug is tolbutamide, marketed as Orinase. Some patients not well controlled by tolbutamide may respond to acetohexamide. Another drug most commonly used is phenformin, which can be obtained in ordinary or slow-release form. It is not associated with the release of insulin as Orinase is.

The fact that pre-diabetics may be diagnosed before the blood sugar problem shows up is an advance in the diagnosis, which usually emphasizes the sugar analysis.

## MULTIPLE SCLEROSIS

### Salk Institute gets grant

Possible immunological treatment of multiple sclerosis is the aim of research at the Salk Institute in San Diego, Calif., which just received a grant of \$86,950 from the National Multiple Sclerosis Society.

The Salk researchers are working with an artificial disease induced in animals: experimental allergic encephalomyelitis (EAE). Like MS, it destroys myelin, disrupting signals between the brain and the rest of the body. In EAE the destruction is believed to be an immune response to an injected tissue, and many researchers believe MS also involves some immunological mechanism. The research team will study blood and tissue samples of animals in various stages of EAE, and compare the results with similar tests on patients with MS.

## INSTRUMENTATION

### New die cuts heart valve replacements

A new precision cutting instrument may make it feasible to make heart valves from a patient's own tissue.

If autografts are used, surgeons believe they can overcome one of the chief causes of rejection—that of using foreign tissue or mechanical devices.

The Jan. 3 MEDICAL WORLD NEWS says a St. Barnabas Hospital group in New York City is currently trying out the new die.

Dr. Warren Zeph Lane, senior cardiac surgeon at St. Barnabas Hospital for Chronic Diseases, did the laboratory and experimental work, using tissue from the thighs of cadavers.

The die now in use was made from stainless steel. It will be available from Electro-Medical Systems in Englewood, Colo.

## ULCERS

### Choice of surgery depends on acidity

Tests for gastric acidity are being used by some surgeons to decide which operation to use for patients with peptic ulcer.

Dr. Karl Dinstl of the First Surgical Clinic of the University of Vienna in Austria presents the idea in the January SURGERY, GYNECOLOGY & OBSTETRICS. The approach is based on preoperative studies using a capsule which telemeters the degree of acidity within the body. The capsule is a transistorized high-frequency transmitter powered by a miniature battery.

Dr. Dinstl and his team studied duodenal ulcers in 77 persons, comparing their responses to the acidity test. Depending on the kind of acidity discovered, he recommends different kinds of surgery.

## HODGKIN'S DISEASE

### Fewer deaths in the South

News that Hodgkin's disease can be treated with drugs that prolong life (SN: 12/21, p. 627) has inspired further study of this abnormality of the lymphatic system that kills some 4,000 Americans each year. It is considered a form of cancer.

The Dec. 28 issue of THE LANCET reports a Harvard study on deaths from this disease in the United States by Drs. Philip Cole, Brian MacMahon and Alan Aisenberg. They report that the death rate among young adults 15 to 34 years of age is only about half as high in Southern states as in the rest of the country. Death rates in older persons are about the same nationwide.

They believe their studies support the theory that Hodgkin's disease is not a single disease but a combination of at least two. Their findings point out the need for more descriptive data for each of the two.

## BIRTH CONTROL

### IUD makes gonorrhea worse

Infection in women using as a birth control method the IUD, or intrauterine device, may be due to gonorrhea, not the device, two doctors at the Royal Hospital of Sheffield, England, report. The device may make the infection worse.

The first IUD, used in the 1920's, lost favor because infection occurred that was often fatal. Called Grafenberg's intrauterine contraceptive device, it has been supplanted by much safer materials in new designs. The Lippes loop, for example, has shown infection rates of only 0.4 and 0.7 per 100 woman-years, and the few pelvic infections that have occurred cleared up quickly.

Dr. R. S. Morton and his co-workers found three cases in which gonorrhea appeared to be the cause of infection, and they suggest that the disease be suspected in similar cases. The IUD should be removed before antibiotic treatment is done, they say in the Dec. 7 issue of the BRITISH MEDICAL JOURNAL.

World Health Organization scientists believe disturbances caused by the IUD may well encourage the spread of gonococcal infection. Damaged cells and blood can form a nutrient transport medium, they say.

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