

SURGERY

Spine Jack Operation

► A "FORMIDABLE" operation in which a permanently placed jack is used to straighten curvature of the spine has been successful in 34 patients.

Dr. H. L. Wenger of Columbia University, New York, reports in the Archives of Surgery, 83:901, 1961, published by the American Medical Association, that 36 patients had undergone the operations since 1954. One died and one developed paraplegia.

The operation requires an incision in the chest and back, and usually seven ribs are removed, Dr. Wenger states. It is not an operation to be entered into lightly, but is reserved for patients who "literally need a direct attack" to straighten a crippling curve that causes great disability.

Patients were out of bed on the sixth or seventh day, and Dr. Wenger said most of his patients left the hospital within two

weeks without any external support.

X-rays are taken during the operation while the patient lies on a specially made box placed under the chest. The middle of the box has swinging hinges so it will bend with the operating table.

A specially designed screw is placed at the upper and lower ends of the lateral curve. Then the turnbuckle jack, which can be elongated with a wrench, is attached to the screws on the concave side of the curve, the surgeon explains.

As the spine jack is lengthened, the curved spine is straightened. The jack, in its final position, lies near the straightened spine and is locked into place.

Dr. Wenger says the age range of patients undergoing this operation was from 10 to 39 years. Nine of them had the curvature from an attack of polio.

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MEDICINE

Herb Medicine Analyzed

► THE SPOTLIGHT of modern science is being turned on the ancient herbal medicines of India.

It was nearly ten years ago, in 1952, that Dr. Emil Schlittler, a scientist with Ciba Pharmaceutical Products, extracted reserpine, a drug with marked sedative and blood-pressure-reducing effect, from the root of a well-known Indian plant, *Rauwolfia serpentina*.

Now in the laboratories of the Ciba Scientific Department in Bombay, six Indian scientists, also working in the Caius Research Laboratory, St. Xavier's College, Bombay, have made a study of the physiological activity of 175 plants of India.

They found that 64 of these medicinal plants are physiologically active; 29 of them show multiple activity and the other 35 plants single specific activity. But 111 were completely inactive, although medicinal powers have been claimed for all.

Herbal medicine plays a role in the life

of people in almost every part of the world, but the systematic study and use of plant materials medicinally in India can hardly be equaled anywhere else.

Two systems of Indian medicine—the Ayurvedic among Hindus, and the Unani among Muslims—provide the most widely used treatment for the people of India. But in recent years, efforts have been made to modernize these systems.

Boards and faculties of Ayurvedic and Unani systems are being set up, and research by national laboratories and other institutions is encouraged. Present-day chemical, pharmacological, microbiological, clinical and other procedures are being used.

Drs. S. S. Bhatnagar, H. Santapau, F. Fernandes, V. N. Kamat, N. J. Dastoor and T. S. N. Rao report the present findings in a supplement to the Journal of Scientific & Industrial Research, 20A, Supplement: 1, 1961, as a result of a ten-year study.

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MEDICINE

Placebos Really Help

► PLACEBOS, inert substances sometimes given for the relief of pain and suffering, or in controlled experiments without the knowledge of patients, do really help, a U. S. Army psychiatrist reports.

Lactose tablets (milk sugar), for example, produced "definite" improvement in 35% of common cold cases in one study, and compared favorably with cold tablets.

Lactose also compared favorably with a muscle-relaxing drug given to patients suffering from anxiety and tension associated with such disorders as peptic ulcer, migraine, backache and tight muscles in the extremities.

Normal salt solution was effective in treating severe wound pain following operations, and in helping patients suffering from lameness to exercise. Another study showed 55% to 60% pain relief by placebos given by mouth to patients with a variety of arthritic diseases.

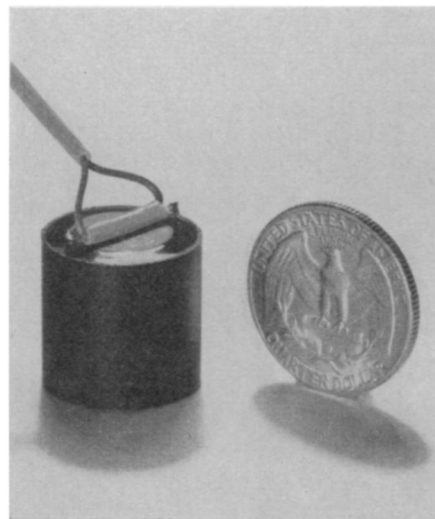
Investigators say the effect of placebos depends on a number of factors. These include the state of the organism at the time of medication, the severity of the pain, the psychological attitude and the circumstances surrounding drug administration.

If a patient is told he will get relief, better results will follow even from true drugs.

However, if he is told that results of a drug are unknown, the response will be less favorable. He can even get bad side effects from a placebo.

Dr. Albert J. Glass, consultant in neuropsychiatry to the chief surgeon, U. S. Army in Europe, reports these findings in the Journal of Oral Surgery, Anesthesia and Hospital Dental Service, 20:25, 1962.

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BIG JOB FOR SMALL INSTRUMENT—The angular differentiating-integrating accelerometer (ADA) developed at General Electric Company, West Lynn, Mass., will help increase the directional accuracy of missiles almost a hundredfold.

PUBLIC HEALTH

Insurance Pays Big Part Of Hospital Expense

► ABOUT 68 out of each 100 persons discharged from hospitals in the United States have some portion of the bill paid by insurance.

The U. S. National Health Survey, based on information obtained from household interviews over a two-year period, reported that about half of the 68% had three-fourths of the hospital bill paid by insurance.

This does not mean that the 32% reporting no hospital bill insurance actually paid all the expense out of their own or other family funds, however. The Veterans Administration provides care for veterans, who make up about 36% of the male population over 15 years of age in the United States.

Also, the Federal Government provides care for other groups such as dependents of the Armed Forces, merchant seamen and American Indians.

State and local governments, health agencies and charitable organizations spend large sums to help finance the cost of hospital services. In addition, friends, neighbors, relatives and employers on many occasions help to share the burden of a large hospital bill.

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