

The bulbar cervical spinal type is the fifth. In this type both the bulb and the adjacent areas of the spinal cord may be involved. The patients may have a mixture of the symptoms of the other types and in addition may have paralysis of the upper torso, particularly the muscles of the chest controlling breathing.

Treatment is given according to the symptoms of the patient which show the type of bulbar polio he is suffering. To save lives, doctors must be quick and keen in interpreting the symptoms and applying the suitable treatment. The tracheotomy operation, feeding by a tube through the nose and oxygen, are among the measures used. A special kind of iron lung has been built with a punched-in head to leave room for the tracheotomy.

Iron Lung Problems

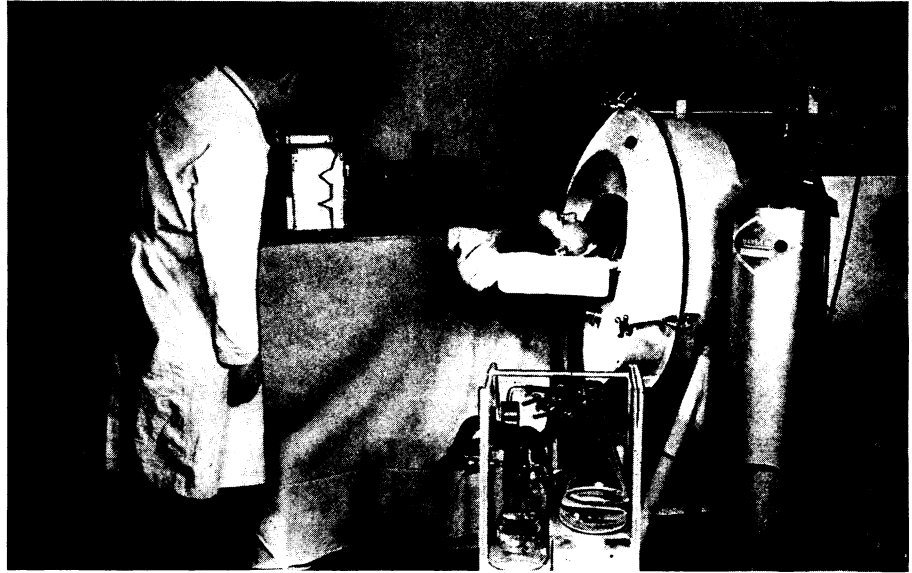
When a patient needs oxygen, how much he needs, and how long he can safely remain out of the iron lung when he is beginning to improve are vitally important questions which in the past have had to be answered by the nurse's or doctor's observations. Even with constant, skilled attendance, it is often hard to answer these questions accurately and quickly. The amount of oxygen within the blood and cells of the body may vary widely within a few seconds. By the time the oxygen lack produces symptoms that nurse or doctor can see, it may be so great that the patient is in grave danger.

A dual photoelectric device which clips on the patient's ear helped the Minnesota doctors answer vital questions about oxygen lack and save patients' lives. The device, called an oximeter, was invented by Dr. Glenn A. Millikan, son of the Nobel Prize winner, Dr. Robert A. Millikan, and himself a distinguished physiologist whose promising career was stopped by a fatal accident this spring.

Record of Oxygen

The oximeter, operating through two color filters, gives an immediate and continuous record of the amount of oxygen circulating in the bloodstream. It was first used by the Army Air Forces to combat oxygen lack in high altitude flying. Part of the recording equipment was a war secret. The instrument was released last summer to help fight polio.

With more patients being saved from polio death, physical therapy, which overcomes the crippling and paralysis the diseases leaves in its wake, becomes more than ever important. Modern methods



FIGHTING POLIO—New life-saving equipment for fighting polio consists of (1) new type iron lung with punched out head to permit access to (2) tracheotomy tube which provides open airway in the patient's throat for (3) giving oxygen that has been bubbled through humidifying apparatus and (4) oximeter clipped to patient's ear to show at once when oxygen in patient's blood falls to dangerous level. Dr. James E. Olam, University of Minnesota physiologist, is reading the oximeter record.

now make it possible for 50% of the victims to recover without any handicap and for another 20% to escape with mild, non-handicapping paralysis. But these good results depend to a large extent on early diagnosis and early, continuous use of physical therapy.

Treatment for infantile paralysis is expensive, but no parent need worry about the cost. The National Foundation for Infantile Paralysis will pay part or all of the cost of treatment for any patient needing such aid. The chief jobs for parents are to avoid getting panicky or letting the children get panicky, to be alert for symptoms that might mean polio, to call the doctor promptly if these symptoms develop and to follow his advice about treatment.

Science News Letter, August 2, 1947

MEDICINE

Better Germ-Killers Built in Laboratory

➤ NEW CHEMICAL drugs that may be better than the wonder germ-killer, penicillin, are being built in the laboratory, the International Chemical Congress in London was told by several teams of chemists.

Intermediate compounds that lead toward new forms of penicillin have been prepared, Dr. A. H. Cook reported for

a group working under Sir Ian Heilbron of London's Imperial College of Science.

The synthesis of benzilpenicillin was announced by Prof. Vincent du Vigneaud of Cornell Medical College, New York City, who first synthesized penicillin itself.

Many steps toward making artificial streptomycin, the other wonder mold chemical, have been taken, Dr. Karl Folkers of Merck Laboratories in New Jersey, told the congress. The synthesis of this drug will be more difficult than that of penicillin, he admitted.

Science News Letter, August 2, 1947

YOUR

HAIR

AND ITS CARE

By O.L. Levin, M.D. and H.T. Behrman, M.D.

Two medical specialists tell you what to do to save and beautify your hair, stimulate healthier hair growth, and deal with many problems, as:

Dandruff — gray hair — thinning hair — care of the scalp — baldness—abnormal types of hair—excessive oiliness—brittle dryness—hair falling out—infection —parasites—hair hygiene, etc., etc.

"A worthwhile book full of important information."
—Ohio State Medical Journal.

Price \$2.00, incl. postage, 5-day-Money-Back Guarantee
EMERSON BOOKS, Inc., Dept. 822-C, 251 W. 19th
Street, New York 11