

MEDICINE

New Anemia Treatment Described by Dr. Murphy

Injection Once Monthly Substitutes for Daily Diet Of Liver or Extract Doses And Yet Is Cheaper

By **DR. WILLIAM P. MURPHY**,
Nobelist in Medicine, 1934

IT GIVES me great pleasure to have this opportunity to briefly comment upon the work in which Dr. Minot and I have cooperated during the past ten years, and for which we have received the highest honor which it is possible for a physician to receive—awarded by the Nobel Prize Committee of the Caroline Institute of Stockholm, Sweden.

Since our initial work on the treatment of pernicious anemia by the use of liver, as carried out in our office practice and at the Peter Bent Brigham Hospital and the Collis P. Huntington Hospital in Boston, much progress has been made in the direction of improvement and simplification of treatment of the unfortunate victim of this disease.

Although the amount of liver necessary for each patient's needs may vary greatly it is necessary for him to take daily an average of from one fourth to one half pound, or during each month a total of eleven pounds in order to keep well. If instead of taking liver the patient is advised to take a potent liver extract by mouth it will be necessary to use daily three vials or doses and in a month eighty-four vials or doses in order to replace the effect of the liver. The average cost of eleven pounds of liver will be about \$5.50, whereas the cost of the eighty-four doses will be approximately \$17.00.

Replaced By Injection

Contrast the difficulties and expense of such a regimen with that which is now possible through the development at the Peter Bent Brigham Hospital with the cooperation of Dr. Guy W. Clark of the Lederle Laboratories, of an extract of liver which may be injected into the muscle and which is so concentrated that it is necessary to use only one injection to replace the eleven pounds of liver or eighty-four doses of liver extract if taken by mouth. And

this concentrated extract for intramuscular injection costs but \$1.20.

Is not such a saving worth while at a time when each and every one of us feels the need for the greatest economy? If one is to realize that treatment by means of this material costs even less than does the liver, is more effective in controlling the disease and is so much more convenient to take, I am sure that we can all agree that progress in the direction of simplification of treatment for patients with this disease is being made.

Let us consider the evidence that progress is being made in the control of this disease as judged on another basis.

The Metropolitan Life Insurance Company has recently compared the death rate from pernicious anemia for the period since 1926 when liver treat-

ment came into general use with a like interval before 1926 when this treatment was not available. They observed that the death rate in individuals with pernicious anemia between the ages of 30 and 50 years has been only half so great since the use of liver as it was before. Above the age of 50 the death rate has not shown such a striking decrease, no doubt owing to complications which are more likely to occur during the older age period.

No Deaths

I feel sure that the death rate will be further reduced and that there need be no deaths from this disease if each patient will continue to take regularly in some form an adequate amount of liver substance as prescribed by his physician. The amount of liver substance necessary must be determined on the basis of regular determinations of the number of red blood cells and the patient's physical condition. It is our hope that even further progress in this direction will be made as others continue to take up the problem with us.

Science News Letter, November 3, 1934

A Viennese has obtained a patent for producing synthetic diamonds by a process that may prove useful for industrial diamonds.



CHANGING TO WINTER CLOTHES

This bird, the first ptarmigan to be raised in captivity, is now putting on his cold-weather coat of white. He is perched in friendliness on the shoulder of David Allen, young son of the scientist who is making a study of these Arctic relatives of the ruffed grouse.