

MEDICINE

Heart Disease Treatment

Penicillin is advised for subacute bacterial endocarditis, if the ailment is due to a streptococcus sensitive to the drug.

► PATIENTS with the kind of heart disease known as subacute bacterial endocarditis, heretofore almost always fatal, should be treated with penicillin if the heart ailment is due to a streptococcus sensitive to the drug.

This advice is given to the medical profession in a report by Dr. Martin Henry Dawson and Dr. Thomas H. Hunter, of Presbyterian Hospital and Columbia University College of Physicians and Surgeons, New York (*Journal, American Medical Association*, Jan. 20).

It is based on apparent success of the treatment in 15 out of 20 patients. These patients are in excellent health, free of all signs of the infection that caused their heart trouble, and all but three are back at work, housekeeping, or whatever their former occupations were. They might be called "cured" except for the fact that the period since the treatment was stopped is only a matter of months and in a chronic disease such as this more time is needed to be sure the germs have really been defeated.

Of the other five patients, two relapsed as soon as treatment was stopped but they are in excellent general condition and the doctors hope they will yet be able to cure them. The other three patients died. In two cases the infection was still present at the time of death and in the third the situation was doubtful.

Since the report on the 20 patients was written, seven more have been treated. Of these, six are well and one relapsed and is now getting additional treatment.

Drs. Dawson and Hunter first used

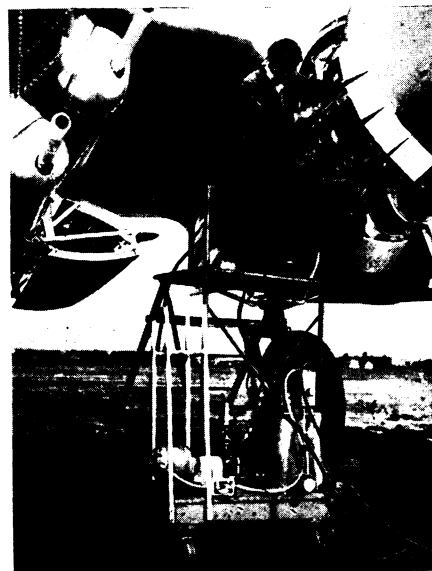
penicillin to treat subacute bacterial endocarditis in 1942 and 1943. The results were encouraging but because supplies of penicillin were then so limited, only two got enough to make recoveries. Another two have since been treated with larger doses combined with the anti-blood-clot chemical, heparin, and they also have now recovered. The fifth died of stoppage of a blood vessel in the brain but post mortem examination showed "substantial healing" of the heart condition.

Besides giving much more penicillin to the patients treated during the past year, heparin was also used. The combination of penicillin and heparin was first tried by Dr. Leo Loewe and associates at the Jewish Hospital, Brooklyn.

They tried heparin, with good results, because the germs that cause subacute bacterial endocarditis grow on the lining membranes of the heart in clumps mixed with fibrin from the blood. Buried in these clumps or clots, the germs are protected from chemical remedies circulating in the blood. Heparin counteracts the tendency of the blood to form clots in which the germs can grow safely and so should make the germs more vulnerable to attack by penicillin.

Drs. Dawson and Hunter found, however, that in five cases they got as good results without heparin as with it in other cases when large doses of penicillin were used. Giving this drug by continuous drip into the muscles instead of into the veins or by repeated injections into the muscles keeps more of it in the blood and is more comfortable for the patient, they report.

Science News Letter, January 27, 1945



PORTABLE PRE-OILER—This compact device delivers pre-heated oil under pressure to the engines of B-26 Marauders. Developed at the Glenn L. Martin Company, it has demonstrated its value both as a saver of man hours and a preventer of failures due to improper lubrication of an engine prior to its first start.

cases of the present war.

The blood's weapon against jaundice is the gamma globulin which is also medical science's most recent weapon against measles. Promising results with gamma globulin in jaundice are reported by Dr. Joseph Stokes, Jr., of Philadelphia and Capt. John R. Neefe, of the Army Medical Corps (*Journal, American Medical Association*, Jan. 20).

The gamma globulin is obtained from blood as a by-product in the processing of human albumin for treatment of shock. It was tried during an epidemic of jaundice in a summer camp for boys and girls last summer. It was given, by hypodermic injection into the muscles, to 53 out of 331 persons who at the time showed no signs of the disease, though the epidemic had been under way for over two weeks. About one-fifth, 20.8%, of those injected got sick compared with 67% among the untreated who developed hepatitis. None of the 53 treated, however, developed visible jaundice of the skin although three girls showed yellowing of the whites of their eyes.

The gamma globulin can apparently either prevent the disease or reduce the severity of an attack if it is given soon after a person has been exposed to it. This is comparable to its effect in measles. It might also be useful in treatment of

MEDICINE

Jaundice Weapon

Gamma globulin can apparently either prevent the disease or reduce severity of an attack if given in time, tests indicate.

► BLOOD DONATED to the Red Cross to save the lives of our wounded fighting men may also provide a weapon

to protect them against infectious hepatitis or infectious jaundice, which is said to be one of the most important dis-