

Machine Helps Miracle Drugs in Disease Fight

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Miracle drugs have held the spotlight in the fight against infections, but a machine has played an important role in the battle.

It is known as the Knott Hemo-Irradiation machine. Hillcrest Memorial Hospital has had the machine for two years, but until recently it was used only in last-resort cases because it is still under "controlled study".

Monday for the first time, it was used on a patient with nephritis, a kidney disease.

Until recently it was used only to fight infections. However, its value in fighting the small virus diseases has been proven many times. It works in cases where antibiotic drugs fail.

Like many other dramatic discoveries in medicine the system for the use of the machine was found by mistake.

Back in 1920 a physician was attempting to kill bacteria in the blood stream by exposing the blood directly to ultra-violet rays.

The experiment was performed on dogs and all the dogs died.

Then one cold night in the laboratory where the physician was working the machine froze up halfway through the process. The dog lived and his infection was cured.

It wasn't until 1928 that the system was tried on a human and it worked with the expected dramatic results. It was tried again in 1933 with the same success against acute infections and today 180,000 patients have received the treatment.

There have been no recorded harmful effects from the use of the ultra-violet ray. Now being used throughout the United States in controlled study the machine has cut down the incident of recurrent attacks of acute rheumatic fever to less than one percent.

Some surgeons use it following bladder surgery. Some physicians claim it is the only effective treatment for virus pneumonia.

In one study of 631 women with pelvic inflammatory disease following childbirth it was found that by using the machine operations were unnecessary in 80% of the cases.

In a controlled study of its use on polio patients on physician used the machine on every other victim in an epidemic of bulbar polio. Forty percent of the patient not given the ultra-violet ray died, while only 9 per cent of those undergoing the treatment died.

Doctors have obtained good results in its use in peritonitis, typhoid fever, and limited results with bronchial asthma. In general, the machine could be used in any disease where it is necessary to increase the amount of oxygen in the blood.

It is usable in disease where the physician wants to dilate the blood vessels or to increase the ability of white cells to destroy bacteria.

Staff physicians at Hillcrest recently attended the International College of Surgeons in Cleveland to study the most recent developments in the use of the "blood" machine.



MACHINE WARS ON NEPHRITIS

A hemo-irradiation machine is used in the fight against nephritis, a kidney disease, for the first time in a Tulsa hospital. The young victim if the disease is Everett Honaker, Jr. 5-year-old son of Mrs Everett Honaker, Catoosa. Blood is removed from his body, passed by the ultraviolet ray then pumped back into the veins. Treating the child are Dr. W.L. Fox and Nurse Emma Dean Reed