

MEDICINE

Talcum-Powder Operation Aids Heart Disease Victims

Simple Task for Surgeon Stops Pain Within Few Hours And Allows Patients To Return to Work in Few Weeks

A NEW source of manpower for the war effort may be tapped by an operation that successfully uses talcum-powder to put new blood into sick hearts and gets helpless heart disease patients back to health and useful work.

The operation was announced by Dr. Samuel A. Thompson and Dr. Milton J. Raisbeck of New York Medical College, at the meeting of the American Medical Association in Atlantic City.

The talcum powder, two teaspoonfuls of it, is put into the space between the heart muscle and its outer envelope, called the pericardium, in an operation so simple, Dr. Thompson said, that any surgeon can perform it in 20 to 25 minutes.

Within a few hours after the operation, patients are free of the torturing pain of angina pectoris and within six weeks are back at work. The improvement is apparently permanent. The first patient given the new operation has remained well for three years and seven months.

Marked improvement followed the operation in eight of the first 14 patients and moderate improvement in two more. The four who died would never have been operated on in the light of present knowledge, Dr. Thompson said, as their heart condition was too bad for them

to stand the operation. All these first 14 patients were so helpless and tortured by the pain of their heart-trouble that they were "sitting waiting to die," although they were still under 50 years of age and one was in the thirties. When the operation is used on patients who have not yet reached this hopeless last stage of heart-trouble, the results will be even better, Dr. Thompson believes.

The patients who can be helped by the new operation are those whose hearts are being starved for blood and oxygen because the arteries supplying the heart muscle are either plugged by blood clots (coronary thrombosis) or so hardened or pinched by spasm that no blood can get through. The lack of blood supply is what causes the pain of angina.

The talcum powder remedies this condition by causing a "tremendous" inflammation. First result of this is dilatation of the blood vessels and greatly increased supply of blood to the heart muscle. This immediately relieves the angina pain. The lasting improvement comes because after the inflammation the sac surrounding the heart is firmly stuck to the heart muscle, with no space in between. In this heart-sac are half-a-dozen arteries which, following the inflammation, start growing into the heart muscle, bringing it new blood to keep

it nourished for its job of pumping blood to the rest of the body.

Studies in animals before operating on patients showed that only talcum powder would cause this permanent and beneficial adhesion between the heart and the pericardium.

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ENTOMOLOGY

Hyacinths To Be Killed Because They Aid Wigglers

BECAUSE one pesky mosquito species has adopted U-boat tactics during its larval or "wiggler" stage of existence, thousands of acres of water hyacinth that float on Florida rivers and lakes will have to be destroyed, regardless of difficulty or expense.

The mosquito in question is a night-biting pest, that disturbs the slumbers of aviation cadets, soldiers, sailors and war workers in scores of military centers that have sprung up in Florida. Entomologists know her as *Mansonia perturbans*; she has no common English name—although doubtless her victims invent numerous ones under the stimulus of her searching proboscis.

Edwin Seabrook, entomologist and technical adviser on mosquito control for Palm Beach and Martin counties, has found that *Mansonia* larvae, unlike those of most other mosquitoes, do not come to the surface to breathe. Instead, they bore into the hollow, air-filled bulbs that serve as floats for the water hyacinth, and get their air in that way. They also drill into the hollow stems of cattails and water lettuce.

This trick keeps them safely beneath the level of suffocating oil spread on the surface, which dooms top-breathing mosquito "wigglers." The only way to abate these pests is to destroy their semi-submerged air reservoirs in the stems of aquatic plants.

Use of the hollow floats of the water hyacinth by this mosquito species is interesting, for it represents an adaptation to a relatively new element in the environment. Water hyacinth is not a native plant; it was introduced from abroad many years ago because of its beautiful violet flowers, and has now spread until it clogs navigation on many Southern streams and lakes. Navigation channels are kept open at considerable cost, but until now it has not seemed worth while to undertake really large-scale destruction of the weed.

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