

MEDICINE

## Russian Lives Saved

**New method of treating brain wounds brings death rate down from 26 per hundred to only 11 out of 100. Closes wound without tube for drainage.**

► NEW and radical methods of treating brain wounds, by which lives of many Russian soldiers are being saved, were reported by Prof. Vladimir Lebedenko, of the First Moscow Medical Institute, at the meeting of the American Neurological Association in New York City.

American, Canadian and English neurosurgeons, civilian and military, thus obtained for the first time a first-hand account of this phase of Russian military surgery.

The features of treating brain wounds developed by Prof. Lebedenko are:

1. Closing the wound, without tube or pack for drainage.
2. Replacing spinal fluid by air in cases of spinal fistula.
3. Use of what he termed "quartz rays," which American scientists inter-

preted as being radiation of wavelengths between ultraviolet and X-rays.

In 719 operations, Prof. Lebedenko reported, there were only 90 deaths. The death rate with his methods has been reduced, he stated, from around 26 out of 100 to around 11 out of 100.

A fourth new feature he has developed for treating spinal fistula is the use of a plaster-of-Paris cap, made in a small size just to cover the fistula or opening.

Impressive to American, Canadian and English Surgeons, also, was the fact that Prof. Lebedenko obtains good results with patients operated as long as one month after being wounded. Prof. Lebedenko stressed, as do his colleagues here and in England, the importance of good care after brain operations. He also stressed the use of sulfa drugs to check infection.



**FOR NAVY**—These high power radio transmitting tubes will enable the U. S. Navy to communicate between ships and shore. They are being inspected in the Westinghouse Lamp Division.

Promise of a weapon better even than the sulfa drugs for fighting infection in brain wounds was held out by Dr. Cobb Pilcher. This is penicillin, the new germ-fighter which English scientists have extracted from a kind of mold. Sulfa drugs are likely to irritate brain tissue, even causing convulsions. Penicillin apparently does not have this effect and when enough of it is available for this purpose, it should prove a great boon to brain surgeons.

*Science News Letter, May 15, 1943*

PUBLIC HEALTH

## Immune Serum Inhalation May Protect Against Flu

► INHALATION of immune serum sprayed from an atomizer may become the future weapon against influenza. The inhalations might be used both to ward off an attack and as a remedy for the disease.

This method of prevention and treatment of influenza is being investigated by the Naval Laboratory Research Unit No. 1, under the direction of Commander Albert P. Krueger, at the University of California.

Mice given inhalations of a globulin fraction of influenza immune horse serum were protected against influenza, the degree of protection increasing with the duration of inhalation, the Naval researchers now report to the American Association of Immunologists.

Treatment with the immune serum was effective when given as long as 48 hours after the mice got influenza. Repeated treatments 24 hours apart were significantly more effective than one treatment.

Inhalation, the scientists found, is a better method of giving the protective and remedial immune serum than dropping it up the nose. Experiments on monkeys and mice with India ink and with radioactive chromic phosphate as indicators showed that with inhalation the material is uniformly distributed and penetrates to the outermost air sacs of the lungs at the ends of the bronchial tree.

Danger of humans getting allergic reactions to the immune horse serum has been overcome or at least reduced by treating the serum with certain enzymes. Evaluation of this treated serum as a preventive and remedy for experimental influenza is in progress.

*Science News Letter, May 15, 1943*