

MEDICINE

Sulfa Relieves Colds

New sulfa drug combining sulfathiazole with ephedrine compound shortens duration, and sulfadiazine spray prevents complicating infections.

► A NEW sulfa drug that brings prompt relief in colds and seems to shorten their duration, and the prevention of ear and sinus infections after a cold by a different sulfa drug used as a nose and throat spray are announced. (*Journal, American Medical Association*, Oct. 30)

The new sulfa drug is desoxyephedronium sulfathiazole and is made by combining sodium sulfathiazole with an ephedrine compound of the type used to shrink the swollen nasal membranes during a cold. It is announced by Dr. Frederick Myles Turnbull, Dr. William F. Hamilton, Eli Simon and Melvin F. George, Jr., of the Lockheed Aircraft Corporation Research Laboratory at Burbank, Calif.

The prevention of ear infection, sinusitis, sore throat, laryngitis and coughs following colds by the sulfadiazine spray originally developed to fight infection in severe burns is reported by Dr. David A. Dolowitz, Dr. Walter E. Loch, Dr.

Henry L. Haines, Dr. Arthur T. Ward, Jr., and Dr. Kenneth L. Pickrell, from the Johns Hopkins Hospital, Baltimore.

The number of nose and throat complications of the common cold are steadily decreasing, the Hopkins doctors point out, because so many family doctors and child specialists are giving sulfa drug pills for every acute infection of the nose and throat.

One objection to giving large doses of sulfa drugs by mouth for an infection in one part of the body is that almost a third of the patients develop nausea, dizziness, fever, skin rash or more serious trouble as a result of the drug. They believe it better to apply the sulfa drug directly to the infected nose and throat, just as sulfa drugs are applied directly on wounds and burns to fight infections of them.

Twenty-four-hour recoveries of patients with red, swollen throats and constitutional symptoms followed the use

of the sulfadiazine spray in many cases when the sore throat was due to beta hemolytic streptococcus infection following a cold, the Hopkins doctors report.

Other streptococcus germs and pneumonia germs do not disappear so quickly from the throat, but apparently lose their virulence or ability to become virulent, judging from the clinical symptoms. It is these streptococcus and pneumonia germs and other bacteria which prolong a cold and cause lost time from work and the more serious complications.

In a group of nurses who were given the spray as soon as they reported to the infirmary with a cold, only 9.7% developed sinusitis, compared with 30% in a control group not given the sulfa spray. The sprayed group developed coughs in 8% and ear trouble in 1.8% but no laryngitis and no sore throats. In the control group, 44% developed coughs, 10% sore throat, 2.3% laryngitis and 4.5% ear trouble.

The nose and throat spraying was done eight to 12 times a day for three days, and five to eight times a day for two or three days more.

The new sulfa drug announced by the Lockheed scientists was used on cotton as a nasal pack and also as nose drops and spray. Combining the ephedrine compound with the sulfa drug reinforces the effect of the ephedrine in shrinking the swollen nasal membranes. The sulfa drug gets farther into the nose and sinuses, and less of the ephedrine need be used. This has the advantage of avoiding the sneezing, sleeplessness, nervousness and heart palpitation which sometimes follow the use of ephedrine alone in nose drops.

More than 1,000 cases of nose, throat and ear infections have been treated with the new drug. In acute colds, it "resulted in rather prompt relief and the duration of the infection was apparently shortened. This was also true in acute sinusitis with less tendency to become subacute or chronic," the Lockheed scientists report.

Many patients with chronic sinusitis were helped who otherwise would have had to have an operation. Acute ear trouble was a much less frequent complication.

Science News Letter, November 6, 1943



FLASH-BURN CREAM—A cream which will protect men in the armed forces against the milder forms of flash-burn has been developed by Lt. Comdr. Gordon B. Fauley, U.S.N.R., after four months of experimentation. Such burns are now one of the most important causes of casualties, particularly during naval battle. Lieutenant Commander Fauley shows his own arm (left) burned by a laboratory-made flash-burn, and (right) shows an enlisted man how to daub on the protective cream.

PLANT PHYSIOLOGY

Plant Sex Activity Speeds-Up Life Processes

► SEX ACTIVITY in plants causes a speed-up in the general non-sexual portions of their life processes, researches by