

MEDICINE

Radiation Sickness Aid

Dramamine, the air and seasickness remedy, is being used to relieve patients suffering from sickness caused by X-ray and radium treatment.

► **DISCOVERY** of a new drug to help cancer and leukemia patients undergoing X-ray or radium treatment is announced by three Mayo Clinic doctors.

The drug is dramamine, the air and seasickness remedy and preventive which started out as a drug for hayfever patients.

Many patients who must have X-ray or radium treatment for life-threatening, deep-seated cancers or for leukemia get so sick from the radiation that the treatment which might save them has to be stopped. Vomiting, nausea, loss of appetite, weakness, exhaustion or prostration are the symptoms of the radiation sickness.

Good to excellent relief of these symptoms was obtained in 65 of 82 patients when they were given dramamine before and after the X-ray or radium treatment, the Mayo Clinic group, Drs. John W. Beeler, Jan H. Tillisch and Walter C. Popp, report.

Every one of the patients had previously had marked nausea from the radiation treatment and 53 of them had been vomiting as well. The dramamine was given to them in three doses: one pill half an hour to an hour before the radiation treatment, another an hour and a half after and a third three hours later. In four of the 13 patients who had a poor result from the dramamine, vomiting between doses made them unable to retain and absorb the drug.

In order to rule out any psychologic effect and make sure the good results were due to the drug, 23 patients with radiation sickness were given pills that looked just like dramamine and which they thought were dramamine but which actually were not. Only 13% of the patients in this group had good or excellent results, com-

pared to 79% in the group getting dramamine.

Of the 82 patients who got dramamine, 15 complained of feeling drowsy or sleepy and three refused to take the pills after three to four days of continued sleepiness. But several of the patients getting the substitute pill, or placebo, also complained of drowsiness and dizziness.

The striking likeness between the symptoms of air and seasickness or car sickness and radiation sickness is what led the Mayo group to try dramamine. Various other chemicals have been tried to relieve radiation sickness, including B vitamins and anti-histamine chemicals. Dramamine is an anti-histamine chemical, although there are other drugs with a more marked anti-histamine effect. In some cases, especially when the X-ray treatment is given over the upper part of the stomach region, a combination of dramamine and injections into the veins of vitamin B-6, or pyridoxine, gave better results, the Mayo doctors report, than either drug alone.

Just how dramamine works as both preventive and remedy for motion sickness is not known. It may have a specific depressing effect on the vomiting reflex. This would explain its action in both motion and radiation sickness, at least in checking the nausea and vomiting. This does not explain why it relieves other symptoms such as the malaise, prostration and lethargy or lassitude that occur in both radiation and motion sickness. These, however, may be secondary to the stimulation of the vomiting reflex.

"The action of dramamine," Dr. Tillisch suggests, "may be by means of relief of the primary and personally catastrophic symptoms of vomiting."

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proportions as are found in the population generally.

Babies afflicted with the hemolytic disease also belonged to the ABO blood groups in normal proportions. There was a suggestive increase in number of Rh-positive normal babies belonging to group A and a decrease in the number belonging to blood group O. The increase, however, was not statistically significant.

Science News Letter, October 15, 1949

MEDICINE

Rest in Bed Is Best Thing for Cold

► **REST** in bed is the best thing to do for a cold, your doctor will read in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (Oct. 8).

Alcohol "in reasonable doses" gets an okay in the treatment of a cold because it causes small blood vessels to dilate and reestablishes circulation in chilled surfaces such as the skin and membranes lining the nose and throat.

Steam inhalations meet the "prime objective" of supplying moisture to the upper air passages during the earliest stages of a cold.

Cathartics, laxatives, fluids beyond the dictates of thirst, special diets, vitamins, oral vaccines and gargles are considered ineffective. Nose drops and aspirin properly used relieve symptoms but do not cure and should not be overused.

Science News Letter, October 15, 1949



HONORABLE MENTION—The photograph, which is a permanent record of the calibration of a half-inch ball bearing by the use of optical flats, won honorable mention in the black-and-white section of the 1949 Photography-in-Science-Salon held in Washington, D. C., Oct. 3-30.

MEDICINE

Rh Tied To Blood Group A

► **WOMEN** whose blood belongs to group A are more likely to be Rh negative and to give birth to babies with the dangerous hemolytic (blood-destroying) disease of the new born than women whose blood belongs to groups O, B or AB.

Figures showing this are reported by Drs. S. P. Lucia, Marjorie L. Hunt and John C. Talbot of the University of California School of Medicine in the journal, *SCIENCE* (Sept. 30).

Discovery of this relation between Rh

sensitization and blood group A was made in the course of studies on more than 11,000 pregnant women during the years 1943-1948.

In a sample of 228 sensitized Rh-negative women, 124 bore children afflicted with the disease. Of these 124, more than half, 66, belonged to blood group A. This is more than would be due to chance alone.

Sensitized Rh-negative women who bore normal babies, however, belonged to the different blood groups in about the same