

## PHARMACOLOGY

### Continued drug surveillance proposed

Despite the rigorous investigative drug studies required by the Food and Drug Administration before drugs are approved for clinical use, problems do show up in large-scale, long-term use that have not appeared in pre-licensing studies. It is hard for physicians to evaluate reports of such unforeseen effects. An example is a controversial study made by the University Group Diabetes Program and supported by the National Institutes of Health that associates use of the oral antidiabetic drug tolbutamide with increased death from heart disease (SN: 8/1, p. 96). Upjohn, which makes the drug, does not agree with the finding. The American Medical Association's Council on Drugs endorsed the conclusion of the study, made by 12 universities of 800 patients over eight years; that diet alone controls mild diabetes as well as tolbutamide does and is preferred, since the drug presents risk of cardiovascular disease. For severe diabetes, insulin is better. The FDA responded to alarm among diabetics by saying that it had no thought of removing the drug from the market or of any action beyond informing physicians of the results of the study and suggesting appropriate labeling changes.

Another case is evidence relating mounting asthma mortality to increasing use of pressurized aerosol bronchodilators, used for asthma relief (SN: 3/2/68, p. 209). The latest evidence was reported by Drs. Willard Harris and George Taylor in the Oct. 5 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

At a two-day international conference on adverse drug reactions organized by the National Academy of Sciences, Dr. Herschel Jick of Tufts University proposed a new Federal intensive drug surveillance agency that would assemble such information from many hospitals and make authoritative recommendations to physicians.

## DIAGNOSIS

### Blood flow and NMR

Two new methods of determining what goes on inside the body by applying more sophisticated technology on the outside have been reported.

Nuclear magnetic resonance is being used to measure the rate of venous bloodflow in the forearm, Drs. O. C. Morse and J. R. Singer, University of California, Berkeley, report in the Oct. 24 SCIENCE. Two separated coils are placed over the vein and the arm is held in a magnetic field. Radio frequency energy in one coil flips over the protons in the bloodstream and the second coil detects the arrival of the flipped protons.

Phonoangiography, which picks up sound just as a stethoscope does, is being used to detect hardening of the arteries. A normal artery is silent. Drs. Robert Lees and C. Forbes Dewey say they have been able to detect and quantitate the sound of atherosclerosis.

## NEUROLOGY

### Multiple sclerosis low in Mexico

Multiple sclerosis is a disease of the central nervous system that produces a progressive weakness of extremities and blurring of vision. In some cases, it may result

in total paralysis. The cause is unknown. Many studies of the frequency of the disease in various population groups have suggested that it is common in temperate climate and rare in tropical regions.

According to the first study done in Mexico, that country has a prevalence rate of 1.6 per 100,000 population, one of the lowest in the world. The results are reported in the November ARCHIVES OF NEUROLOGY by Dr. Milton Alter of the University of Minnesota and Dr. Ladislao Olivares of the Centro Hospitalario 20 de Noviembre in Mexico City.

One view of multiple sclerosis is that it may be related to penetration of measles or polio virus into the central nervous system.

Mexico ranks high among countries with diseases of poor sanitation, especially poor water sanitation. Such countries have low incidence of measles and polio; a high natural immunity is built up to these viruses, which have been associated with poor water sanitation.

## OPHTHALMOLOGY

### Heat treatment may cause cataract

Diathermy—high-frequency microwave radiation—is widely used to produce heat to relieve pain caused by neuromuscular strains and also to stop severe bleeding after dental extraction.

According to a report to the American Public Health Association last week, a patient developed cataracts in both eyes six months after a closely spaced series of twelve 15-minute diathermy treatments. Human cataract has been associated with ionizing radiation but this is the first fully documented case believed to result from radiation at the microwave frequency (a frequency used in microwave ovens). The report was made by Dr. Russell Carpenter of the U.S. Public Health Service's Northeastern Radiological Health Laboratory, Winchester, Mass.

## PSYCHIATRY

### Women are more nervous

Women's lib groups will not like a report "Selected Symptoms of Psychological Distress" just issued by the Department of Health, Education and Welfare—although they might say the results are due to cultural conditioning in a man-dominated world. The report presents answers to 12 questions asked a sample of 7,710 persons in the Health Examination Survey conducted in 1960-62. For every symptom of such distress, the percentage of women who said they had experienced it was higher than that of men. Some examples:

	Percentage of	
	Men	Women
Felt impending nervous breakdown	7.7	17.8
Nervousness	30.2	65.6
Insomnia	24.1	40.9
Nightmares	6.9	12.3

A larger percentage of respondents felt an impending nervous breakdown (13 percent) than those who thought they had actually had one (5 percent). Correlation with occupation was unexpected. Professional, operative and clerical occupations reported lower symptom rates than farmers and household and service workers.