Medical Sciences Notes

GYNECOLOGY

Hormone Degenerates Uterine Tumors

A synthetic form of progestin, a female sex hormone, produced degeneration of uterine tumors in 24 women in Mexico City, Dr. Joseph W. Goldzieher reports.

Dr. Goldzieher, head of the department of endocrinology at the Southwest Foundation for Research and Education, San Antonio, believes pills containing large doses of medrogestone may eventually eliminate the need for surgical removal of tumors of the uterus, though he cautions that the results of his work are preliminary.

Progesterone, a progestin naturally formed in women, has been widely used in oral contraceptives as an agent to inhibit ovulation. In pregnant women, who of course are not ovulating, uterine tumors are known to show marked reduction spontaneously, particularly during the last three months of pregnancy. This phenomenon led Dr. Goldzieher and his colleagues to believe female hormones may play a role in getting rid of the tumors.

Tests on 46 women scheduled for surgery indicated that 24 who received large doses of the synthetic hormone for three weeks showed intense degenerative changes in tumors examined after the operation. Twenty-two women treated for two weeks showed similar but less consistent changes.

DATA PROCESSING

Scientific Binge for Zoos

"Zoos generally are sitting on the threshold of a great scientific binge," according to the director of the San Diego Zoo. If they cross that threshold, they will be in the world of data processing—in the interest of scientific research.

Laboratory scientists in all disciplines are in desperate need of new species of experimental animals and no one is in a better position to help them find them than zoo-keepers and aquarists, Dr. Charles R. Schroeder says. Zoo keepers are in the business of providing hotel and hospital facilities for all kinds, sizes and shapes of animals and have a tremendous store of potentially valuable information about their feeding, breeding and living habits. That knowledge, Dr. Schroeder says, should be tapped, put on tape, fed into a national computer and disseminated by the 100 zoos and aquaria in the U.S.

TOXICOLOGY

Artificial Sweeteners Studied

Artificial sweeteners have been cited as a possible cause of birth defects and fetal deaths. The Food and Drug Administration is investigating effects of cyclamates, an ingredient of most such sweeteners; it plans no immediate action because evidence is scant.

Large doses of artificial sweeteners, equivalent to about 100 teaspoons of sugar a day, have been known to have a laxative effect on humans but consumption of such quantity is unlikely. Spokesmen for the National Institutes of Health report no known relationship between artificial sweeteners and birth defects among either normal or diabetic women.

The FDA investigation was started as a result of isolated data linking cyclamates and birth defects, the most recent being a study by Dr. Ryoka Tanaka of the Japanese Public Health Service. He found that about half of the unborn fetuses of mice died when the mothers were given large doses of sweeteners between the fourth and seventh days of pregnancy. Dr. Fredrick J. Stare, Harvard nutritionist, said there is no necessary correlation between the effects in mice and in man.

DRUG POTENCY

FDA Uncovers Impotent Drugs

Drugs from more than half of 246 drug manufacturers failed to meet required potency levels, the Food and Drug Administration said last week.

In an FDA survey of drugs in 20 categories in which potency is of considerable medical significance, including sex hormones, anticoagulants, antihistamines and central nervous system stimulants and depressants, 8.2 percent of the products were either more or less potent than they should be. FDA Commissioner James L. Goddard said the survey is the first of a continuing review program on drug quality as well as potency.

A total of 4,573 drug samples were collected—2,582 marketed under their generic or technical name and 1,991 marketed under their brand name. Of these, 7.7 percent of the former group and 8.8 percent of the latter were unacceptable.

FDA follow-up actions in these situations include reinspection of manufacturing plants, recall or seizure of products, or citation of the manufacturer. In most cases, improved quality control measures by the drug producers would insure against repetition of potency errors, an FDA spokesman said.

OBSTETRICS

Baby's Blood Changed in Womb

A lifesaving procedure that changed a baby's blood before birth is reported from Britain. Believed to be the first such operation in that country, it was performed on a 20-year-old woman at St. Bartholomew's Hospital, London. Birth is due March 21.

The procedure has been practiced in the United States in cases of the Rh negative factor now correctable in the uterus. Without correction, the condition, due to interaction between the mother's and baby's blood will lead to the development of anemia and a bad heart condition in the child. The child has little hope of even surviving induced labor, or if he does, of living afterward. The London operation took five and a half hours.

DRUG DOSES

Teaspoons Must Be Teaspoons

If a teaspoon is not really a teaspoon, it isn't worth much—at least if it is being used to measure out medicine dosages.

Inaccurate doses of medicine, particularly if the patient is a very young child, can have serious consequences, Dr. Lennart Richard said in a recent issue of the Swedish Medical Journal. Since last March, all liquid medicines in Sweden have been sold with a special milliliter measuring device, but inquiries at 10 pharmacies indicate many people still use spoons.