

## MEDICINE

# Cancer Preventive

**Treatment that reverses early pre-cancerous condition in women to normal reported. Put mold remedy, aureomycin, on pre-cancer to get reversal.**

➤ A CANCER preventive treatment which reversed a very early pre-cancerous condition in women to normal was announced at the meeting of the Southern Medical Association in Dallas.

The treatment consists in putting the mold remedy, aureomycin, on the pre-cancer.

Announcement of this cancer preventive treatment with a report of long-term results in 13 women was made by Dr. J. Ernest Ayre, director of the cancer cytology center, Dade County Cancer Institute, Miami, Fla.

While this seems to herald a mold chemical conquest of cancer, the treatment is effective only in one "special breed of cancer," Dr. Ayre emphasized. In his medical report he termed this kind of cancer "cervical carcinoma in situ," meaning a pre-invasive cancer of the cervix, or lower, narrow end of the womb.

"Of greatest significance," Dr. Ayre said, "is the fact that the results with this treatment indicate this form of cancer is an infectious process and at this stage regression of the cancer is possible with antibiotic (mold chemical) treatment in some cases."

The treatment is not successful in all cases, he stressed. Of the 13 women he reported on, regression of this type of pre-invasive cancer was achieved in six. In one of the six, the condition later recurred.

Similar results in three other women treated with aureomycin have been reported to Dr. Ayre by two other physicians.

Some of the women Dr. Ayre reported on had been getting a modification of the famous Papanicolaou test for cancer for two and one-half years. During all this time, the test, week after week, showed positive. In this test, as Dr. Ayre has modified it, material is scraped from the spot in the cervix where cancer is likely to develop. Microscopic examination of the scrapings shows whether there is a change within the nucleus of the cells.

This change, Dr. Ayre explained, is the earliest sign of developing cancer. With his modification of the Papanicolaou test, the change can be detected at least one year before anything suggesting cancer can be seen by visual inspection.

The women who got the aureomycin preventive treatment also have had this modified test made regularly for the one and one-half years since treatment. The test has been negative, meaning the cancer

regressed, all that time in all but one of six women, Dr. Ayre reported. The cancerous condition recurred in the sixth.

Because this pre-cancerous condition is such a very early form of cancer, which would not develop to the terminal stage for one to five years, there is time to cure it by surgery, radium or deep X-ray treatments if the aureomycin treatment is not effective. There is no way of telling whether it will be effective until it has been tried, Dr. Ayre said. The aureomycin treatment only takes three or four weeks to reverse the condition in cases in which it succeeds.

Aureomycin is not effective, in Dr. Ayre's experience, in checking the invasive, spreading kind of cancer cell.

The pre-invasive kind of cancer can be found in one or two out of every 100 women given Dr. Ayre's special cell scraping test.

Dr. Ayre started his work that has led to the success reported now some years ago when he was at McGill University in Montreal. At that time he believed that cancer

of the cervix was primarily an infection started by a germ or virus.

On this theory, he began four years ago to try various anti-germ chemicals, including sulfa drugs, penicillin and streptomycin, and various gland hormones. None of them was effective until he tried aureomycin. Scientists at Lederle Laboratories, where aureomycin is made, also had some evidence of an anti-cancer effect of the mold chemical in laboratory animals. But Dr. Ayre's work gives the first evidence on human patients.

There are probably many causes of cancer and many types of infection associated with its start, Dr. Ayre believes. Other mold remedies, or antibiotics, may be effective in some of these other kinds. Dr. Ayre has started work on this also, but is not yet ready to report any results.

Science News Letter, November 17, 1951

## INVENTION

## No-Scuff White Sidewall Tire Is Patented

➤ MARCIA GOTTSCHALL, Detroit, has invented a white sidewall tire which, she claims, will not be scuffed by rubbing against the curb. She has assigned her patent, number 2,572,259, to the United States Rubber Company, New York. The sidewalls are protected by a projecting rib around the side of the tire.

Science News Letter, November 17, 1951



**REFRACTING SHIELD**—Thurlow Wilfong, University of Washington graduate physics student, here shows the strong refraction of a leaded glass shield used in experiments in which he demonstrated for the first time that positrons will cause Cerenkov radiation, a cone-shaped type of radiation known to be created by electrons.