

MEDICINE

Sponge Aids Cancer Fight

➤ A NEW aid in the fight against cancer has been developed by Dr. Sidney A. Gladstone of New York Polyclinic Hospital and Medical School.

It consists in a method for getting material for cancer detection in the early stages of the disease before it shows signs or symptoms that either patient or doctor notice.

All the doctor does is to rub a tiny piece of a gelatine sponge over the surface of the area that might be cancerous. The sponge absorbs fluids, cells and tissue particles. The sponge and its absorbed contents are then fixed in formalin, embedded in paraffin and cut by a microtome into very thin slices. The slices are then stained and on examination by a trained pathologist reveal the presence of cancer, if the patient has cancer.

The fixing, staining and other treatment of the sponge are essentially the same as in the procedure for cancer diagnosis, called biopsy, in which a tiny piece of suspected cancer is cut out for microscopic examination.

The sponge method is not only simpler but has the great advantage of picking up

cancer cells from surfaces that look so normal the doctor does not suspect the need for punching or cutting out a bit of tissue for examination.

In one case, for example, a 48-year-old woman's "vague complaints" were thought due to the glandular changes of middle age. The sponge biopsy of the womb was made in the course of examination, although no abnormalities were seen. The sponge biopsy revealed the presence of cancer, which was confirmed at operation, although a surgical biopsy missed the cancer.

Cancer of the skin, vocal cords, bronchi, esophagus, rectum and stomach can also be diagnosed in early stages by this method, Dr. Gladstone pointed out in a report to the NEW ENGLAND JOURNAL OF MEDICINE (July 14).

Because the sponge must be able to withstand the dissolving action of alcohol, chloroform, acetone or other fluids used in preparing the material for microscopic examination, Dr. Gladstone has worked chiefly with a sponge called gelfoam, manufactured by the Upjohn Company.

Science News Letter, December 10, 1949

PSYCHIATRY-DENTISTRY

Caries-Neurosis Link

➤ TOOTH DECAY and a neurotic personality seem to go together.

Doctors and dentists have for some time assumed that mental and emotional factors might affect the teeth, just as these factors play a part in stomach ulcers, colitis, asthma and other bodily disorders.

Now statistical evidence for the relation between personality and tooth health has been obtained.

A Bernreuter personality inventory, said to be the "best and most valid test of its kind to measure traits of personality as divorced from intelligence," was given to 50 men and women faculty members, students and employees of Tufts College Dental School.

The same 50 also were scored as to the number of decayed, missing and filled teeth.

When the two scores were compared, they showed that all but four of those with the least neurotic tendencies had a D.M.F. tooth score of less than 40, while all but five of those above the lowest levels of neurotic tendencies on the personality score had a D.M.F. tooth score above 40.

The data have statistical significance with less than one percent possibility that the results are due to chance, Dr. John H. Manhold and Vivian W. Manhold who made the studies at Tufts report in the scientific journal, SCIENCE (Dec. 2).

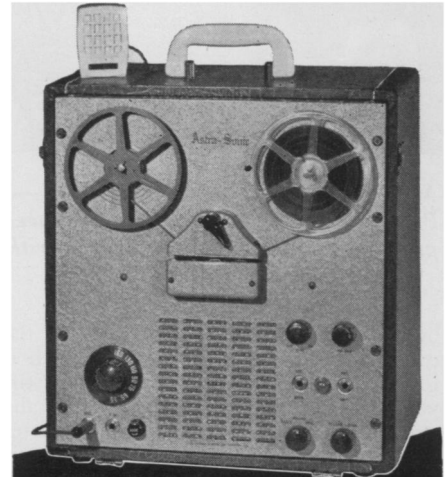
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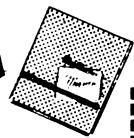
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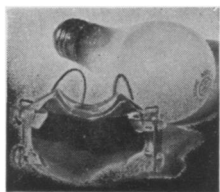
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