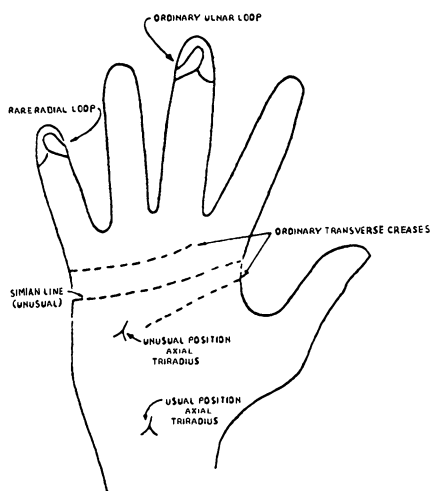


MEDICINE

Diagnosis by Palm Reading

Abnormal palm markings in newborn children give clues to congenital heart, kidney and lung disorders that normally would not be found until later in life.



State University of New York

MEDICAL PALM READING—This diagram of a palm shows normal and abnormal creases. Drs. Ruth Achs and Rita G. Harper of the State University of New York Downstate Medical Center in Brooklyn believe the "simian lines," an unusual fusing of the two transverse creases, may indicate congenital disorder. The usual and unusual positions of the triradius are also indicated.

MEDICINE

Bacteria Dissolve Cancer

► **DESTROYING MALIGNANT** tumors without harming healthy cells could be a step closer as a result of injecting harmless bacteria into humans and animals in West Germany.

Dr. Dietmar Gericke, who did his investigation in the Laboratory for Cancer Research, Farbwerke Hoechst A. G., Frankfurt on the Main, a large pharmaceutical company at nearby Hoechst, reported his conclusions in *Die Naturwissenschaften* 52: 629, 1965.

The long search for harmless bacteria or viruses that at least partially dissolve various types of cancer, especially sarcomas, has been going on since at least 1866, and the end is not in sight.

Like his American and European predecessors, Dr. Gericke claims no cure, but his work with nonpathogenic material resembling *Clostridium butyricum*, could advance understanding of side effects and results with different kinds of cancer.

Both in animals and in preliminary work with humans, partial dissolving, or lysis, of the cancer has been achieved by injection of spores, which spare normal tissue. Remnants of the tumor remain undissolved in the border region of healthy cells, however, and further work is planned in the hope of overcoming this drawback.

U.S. scientists who have worked with nonpathogenic bacteria in attacking cancer

► **PALM READING**, formerly confined to dark little rooms on the other side of beaded curtains, has been turned to the use of medicine. Two Brooklyn pediatricians found they can use it to spot various congenital disorders in newborn children.

Palm markings and fingerprints can often give a "first clue" to heart, brain, kidney, lung and other difficulties that otherwise would not appear until later, said Drs. Ruth Achs and Rita G. Harper of the State University of New York Downstate Medical Center in Brooklyn.

Squirming infants have made conventional inkpad printing virtually useless as a diagnostic tool, since their wiggling hands almost always produce blurred images. Dr. Achs, however, has a special, one-of-a-kind gadget that uses no ink at all—instead, it takes Polaroid pictures through a prism of the skin ridge patterns on a baby's hand.

In her palm readings, Dr. Achs looks

for three signs as indications that further examination is warranted:

1. The "simian line." This refers to the two creases running across the palm nearest the fingers. If they are joined as one line, this is considered abnormal.

2. A misplaced "axial triradius." This is a pattern of skin ridges at the base of the palm, near the wrist. If it is elevated relatively far from the wrist, there may be some problem worth looking for.

3. The "radial loops." These are the fingerprint patterns forming loops whose open ends face the thumb. If they are present on any finger other than the second, this too is suspicious.

Abnormalities such as these develop during the first three months of fetal growth, the same period during which many congenital disorders also occur.

Palm reading scored well in an examination of infants whose mothers had contracted German measles during pregnancy. Out of 19 congenitally affected babies, nine, or 47%, had one or more of the three key handprint abnormalities. Only 14% of 250 normal babies, however, showed similar signs.

The technique is known as "dermatoglyphics."

• Science News Letter, 89:69 January 29, 1966

PUBLIC HEALTH

Lime-Flavored Drink Corrects Potassium Loss

► **A LIME-FLAVORED** effervescent tablet has been developed to treat the lack of a vital electrolyte, potassium, in the body's fluid system. Too much or too little can cause death.

Potassium supplements are on the market, but the new prescription tablet, called K-Lyte, makes a more palatable drink when dissolved in water. In water it becomes potassium citrate, potassium bicarbonate and potassium cyclamate. It has been well tolerated and effective in studies on humans, the manufacturer, Mead Johnson Laboratories, stated.

Nearly 50 possible reasons for potassium deficiency have been identified in recent research. As many as 20% of hospital patients may suffer from loss caused by vomiting and diarrhea. Other reasons for loss include treatment by drugs such as thiazine diuretics and corticosteroid hormones. Intestinal surgery, metabolic diseases, kidney disease, severe burns and nutritional deficiency also cause potassium loss.

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