MEDICINE

Skin Cancer Surgery

➤ TO AVOID the spread of skin cancer in deeper tissue, surgery should be wide and deep, Dr. Richard D. Brasfield of Cornell University Medical College, New York, has reported.

Skin tumors may heal over the surface but continue spreading unless thorough surgical or X-ray treatment is given, Dr. Brasfield told the American Academy of General Practice meeting in Miami Beach, Fla.

Carcinoma of the skin is the most common type of cancer, the surgeon said. Men are more likely to have cancer of the exposed skin but women are equally susceptible in unexposed areas. Chronic exposure to the sun is the usual triggering factor.

The two types of skin cancer are basal cell carcinoma, usually a small nodule beneath the skin, and epidermoid carcinoma, marked by ulceration and infection.

Dr. Brasfield told his colleagues that they should watch for suspicious moles. Malignant melanomas, a rare group of highly lethal skin growths, usually develop from moles. Any tan, brown or black skin lesion that changes color, size or shape should be immediately suspected.

Although the family doctor will see thousands of moles during his total practice, he may see only as many as two melanomas, but surgical excision is the best treatment for such cases, the surgeon advised.

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Three "A's" for Youth

➤ ACCEPTANCE, affection and approval are the three "A's" that keep teenagers from becoming juvenile delinquents.

Telling teenagers that they are developing into lazy, worthless individuals is a push in the direction of anti-social behavior, Dr. Edward M. Litin, consultant in psychiatry at the Mayo Clinic, Rochester, Minn., told the American Academy of General Practice meeting in Miami Beach, Fla.

Another psychiatrist, Dr. George A. Constant of Victoria, Texas, said children who have not had the advantage of the three "A's" will have a "full warehouse of bad feelings." If they do not get rid of these emotions, the "warehouse" will come apart at the seams.

He said the physician has the major responsibility to teach parents the importance of the three "A's" in rearing their children.

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BIOLOGY

New Amino Acid Found

➤ A NEW AMINO ACID has been discovered by biochemists at the University of Cincinnati College of Medicine.

This is the first amino acid with a basically new structure to be discovered in more than 25 years. Only 20 other amino acids, the building blocks of protein, have been found in mammalian tissue since the first was described in 1810.

The new amino acid, tentatively designated as beta-hydroxyproline, was found in a collagen, the protein that makes up connective tissues such as tendons. It was found in the collagen of the Achilles tendon in cattle.

Announcement of the discovery was made in Atlantic City to the Federation of American Societies for Experimental Biology by Dr. James D. Ogle, Dr. Milan A. Logan and Ralph Arlinghaus of the University of Cincinnati College of Medicine.

The first clue to the existence of the new amino acid came, Dr. Ogle said, when a strange color reaction occurred during chromatographic separation, with an ion exchange resin, of a piece of the collagen molecule into its component amino acids.

"We got an amber-colored peak where no peak was expected. At first, we thought it was a mistake, but a repeat of the separation gave the same result."

The color of the peak, Dr. Ogle said, also suggested what the structure of the substance might be. It was neither red, the color expected for proline, nor colorless, the reaction expected for gamma hydroxyproline. It was amber—somewhere in between.

Dr. Ogle reported that the new amino acid probably is beta-hydroxyproline, structurally similar to gamma-hydroxyproline, but with the hydroxyl group in a different position.

The new amino acid makes up two-tenths to three-tenths of one percent of the particular collagen in which it was found. Gamma-hydroxyproline, by comparison, constitutes 10% to 12% of this collagen.

At present, Dr. Ogle said, no one knows what role the new amino acid plays or where else it is found.

"After we have synthesized it and verified its structure, we probably will look for it in other collagens and try to determine whether it is found in young or old, diseased or healthy animals. Right now all we know is that it is new."

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Rich Russian Overweight

➤ THE RICH RUSSIAN frequently is an overweight Russian, nutrition scientists attending the Federation of American Societies for Experimental Biology meeting in Atlantic City, N. J., learned.

Dr. F. E. Deatherage of the department of agricultural biochemistry at Ohio State University, Columbus, reported that the basic diet for Russia's 210,000,000 people, more than half of them rather poor, is bread and porridge.

Even those who can afford to pay the high cost of scarce food items such as meat, dairy products, food fats, fruits and vegetables do not rebalance their diets. They simply eat more bread and porridge, perhaps in more sophisticated form.

As a result, Dr. Deatherage said, "Obesity due to too much carbohydrate is not at all uncommon in higher income groups."

Russia, a country with half its people engaged in food production, is trying to solve its food problems in the same way it developed sputniks and armaments programs, Dr. Deatherage said, by putting its best scientific brains to work.

But shortages of certain foods make some of the program "inefficient and impractical" by American standards. For example, the Russians do not have the usual high yield raw materials for making edible oils. They make their oils from bone marrow, cherry seeds and grape seeds, all of which give low yield.

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Inherit Coffee Insomnia

➤ PEOPLE who drink one cup of coffee, then lie awake half the night, may have their ancestors to thank for their plight.

Susceptibility to caffeine could be genetically controlled, a professor of medicine and one of his students reported in Atlantic City, N. J. If this is true, addiction to drugs and alcohol also might have something to do with heredity.

The new theory linking heredity with caffeine insomnia was developed after Dr. Avram Goldstein and Richard Warren of the Stanford University School of Medicine, Palo Alto, Calif., tested coffee-drinking medical students.

During a period of years, 300 students were subjected to a "double-blind, placebo-controlled" test. After abstaining from coffee for at least 10 hours, students were given decaffeinated coffee that sometimes contained 150 milligrams of caffeine, the amount in a strong cup of coffee, and sometimes only lactose powder.

About 20% of the students always were kept awake by the caffeine but never by the placebo. Another 20% never were disturbed by either caffeine or placebo, and the others had variable reactions.

The researchers also reported to the Federation of American Societies for Experimental Biology that caffeine does not make a person dream any more often than usual. Although it may keep the person awake for a while and disturb the soundness of his sleep, it apparently does not make a sleep less refreshing.

Because some of the students always reacted to caffeine and some never did, the researchers thought that those who did not react might be absorbing caffeine into the blood much more slowly. But it was not so, both absorbed rapidly and completely.

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