

MEDICINE

Chemical Checks Leukemia

The chemical 6-mercaptopurine has temporarily checked leukemia, but more research is needed for chemical agents to treat leukemia. Antibiotics are being investigated.

► **TEMPORARY DISAPPEARANCE** of leukemia in more than half the acute cases treated with 6-mercaptopurine (6MP) has been reported by Dr. Henry D. Diamond of Memorial-Sloan Kettering Cancer Center, New York.

In an interview with *SCIENCE SERVICE* Dr. Diamond said that about 50% of the children who get a remission of leukemia in its acute state will live a year, or twice as long as formerly.

Also ranking among the foremost effective drugs in treating acute leukemia are aminopterin and methotrexate, which combat folic acid, and cortisone.

"We need to continue research for chemical agents to treat leukemia," Dr. Diamond said, "and we are at present delving into antibiotic products on an experimental basis. So far we have found no better effects than we have had from 6MP.

"We must learn more of the process of

the disease to get a more rational approach to treatment," he said. Advice for leukemia prevention is limited to warning against irradiation exposure and exposure to benzol, a volatile liquid hydrocarbon found in chemical industries.

Leukemia is cancer of the blood, which is characterized by disorderly and uncontrolled growth of the white blood cells. It accounts for nearly 10% of reportable cancer cases in Connecticut. This state is cited because it has the best cancer statistics in the country. The law requires that cancer be reported there.

Dr. Diamond opened the 1960-61 series of programs sponsored by the St. George Society, composed of medical students from the three schools of medicine in Washington, D. C. The programs are in cooperation with the Washington American Cancer Society.

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MILITARY SCIENCE

Test One-Man Missile

► **ASSESSMENT TRIALS** of the Vigilant, a new type of British anti-tank missile light enough to be carried by one man, are planned for early next year. Vigilant (short for the full designation, visual guided infantry light anti-tank weapon) has been developed over the past three and a half years as a non-government project by Vickers-Armstrong (Aircraft) Ltd. It is a wire-guided missile and has no control box or other auxiliary gear.

The missile is launched from its carrying

box and guided by a hand-held sighting device. It is claimed to be ready for instant use since no field assembly or testing is necessary. The total system weighs about 45 pounds and, in preliminary tests, it has been successfully dropped with and operated by paratroops.

So far it has cost about \$3,000,000 to develop the missile. Vickers-Armstrongs became part of the British Aircraft Corporation in the recent mergers affecting the British aircraft industry, and Eric Beverley



MISSILE READY FOR LAUNCH—Directly from its carrying case.

of BAC said his company hoped to achieve mass production of Vigilant at low cost. It could be in service by mid-1961.

Not only is Vigilant a handy infantry weapon, but its small size and weight make it readily adaptable for fitting to light reconnaissance and other fighting vehicles.

Its special feature is its accurate and easily operated control system. The average soldier can learn to use it quickly, five hours of simulator training being normal.

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LARGE EARRINGS—This Lydian aristocrat wears purple garments and large earrings on a terracotta frieze, found recently by a Harvard-Cornell expedition beneath the ruins of Sardis, Turkey. The frieze dates from the sixth century B.C. when Sardis, ancient capital of Lydia, was destroyed by the Persians.

DENTISTRY

Mouthwash Advertising Condemned by Dentist

► **MOUTHWASH ADVERTISING** gives the public a false sense of security about the health of their gums, Dr. Alvin C. Hileman, chairman of periodontics at the College of Physicians and Surgeons School of Dentistry, San Francisco, has charged.

Mouthwashes and lozenges only mask or suppress symptoms rather than cure periodontal, or gum, disease, Dr. Hileman told the American Dental Association's meeting in Los Angeles. Citing "before" and "after" photographs in magazines, he said that cessation of bleeding and improvement of gum color are not the sign of a cure.

He pointed out that the repeated use of products encouraged by advertising invites deeper destruction of supporting tissues before a dentist is consulted about the underlying cause of the trouble. "Remarkable" results are claimed after one or two weeks.

Once the mouth feels good again, Dr.