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Newsweek

November 2, 1981 / \$1.50



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A Progress Report

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Christian Children's Fund, Inc.

LETTERS

decide to withhold their grain and produce from the marketplace, spot shortages could occur and higher prices would result. The choice is to pay us family farmers now or pay the corporations later.

DELWIN YOST
Sisseton, S.D.

There was no discussion in your article of the fact that the Reagan Administration is paying for grain storage during a time when ketchup and relish were almost designated vegetables for the school-lunch program. Your magazine itself has published articles about national and world hunger—no, starvation—and yet there is no mention that the money provided for grain storage could instead be used to help set up a food-distribution system for hungry people.

DORIS HESS
Los Angeles, Calif.

The Nuclear Game

Although it was refreshing to read Meg Greenfield's "The Limits of the Nuclear Game" (Oct. 19), I disagree with her conclusion that President Reagan recognizes "the stark limits on the way the nuclear game can be played." Both he and the Defense Department have argued that offense equals defense for too long. They believe offensive weaponry will defend this country, when in fact it only permits us to lash back spitefully at our enemies from our graves.

THOMAS J. BREITEN
Smithtown, N.Y.

Saudi Policy

Your Oct. 12 PERISCOPE reported on efforts being made for the participation of Saudi Arabia with other countries in establishing a collective strategic consensus to aid Sudan. You also mentioned that the Kingdom of Saudi Arabia would cooperate with other countries to overthrow the regime of President Muammar Kaddafi. The policy of the Kingdom of Saudi Arabia is clear and frank, based on the principle of noninterference in the internal affairs of other countries. The Kingdom of Saudi Arabia will definitely abstain from doing so with regard to President Kaddafi, who is the head of an Arab state and a member of the Arab League, which includes us.

NAILA AL-SOWAYEL
Saudi Press Agency
Washington, D.C.

The Plight of the Tribes

It was interesting and yet depressing to read about the calculated effort made by civilization to remove tribal peoples in the name of progress (SCIENCE, Oct. 12). Over the years I have taken an interest in television specials and other news stories describing tribal life, and I have marveled at the manner in which tribal people can survive without what we consider to be the necessities of life. Thanks to your article, I

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16 mg "tar," 1.1 mg nicotine av. per cigarette, FTC Report Mar. '81

PERISCOPE

'No' to Taiwan on the FX Jet?

In a classified report, an Administration study group looking into Taiwan's defense has concluded that the Chinese Nationalists do not need the FX jet, a new generation of fighter aircraft. The Nationalists have not formally requested the sophisticated plane to replace their F-5E's, but they have been lobbying for it for several years. Under the Taiwan Relations Act, the United States must provide the island arms "to maintain a sufficient self-defense capability." But after several months of close examination, Pentagon and CIA analysts find no compelling military reason for Taiwan to have the more modern fighters, whose sale would seriously chill U.S. relations with China.

Walesa's Visit to North America

Barring unforeseen complications in Poland, Solidarity leader Lech Walesa will make a triumphant appearance next month at the AFL-CIO's centennial convention in New York and take a tour of Polish communities in Canada, Chicago and Detroit. In deference to the striking American air-traffic controllers, Walesa plans to fly from Poland to Montreal, visit with Polish Canadians, then drive to New York. Some Washington officials worry that his trip may appear provocative to the Soviet Union, but they see no way of denying Walesa a visa without stirring up trouble for the Administration with U.S. labor.

Blockbuster IMF Loan for India

On the eve of Cancún—and completely without fanfare—the

the committee issue, pointing out that even after a criminal conviction, no House member has *ever* been removed from his committee assignments. Hoping to avoid the kind of messy struggle that could make Atkinson a martyr, Democrats may instead settle for putting extra Democrats on the committees where he serves.

Soaring Plans for the Space Shuttle

NASA and a group of airline pilots are so sure the space shuttle will be a success—and eventually a commercial enterprise—that they are working on a program to train pilots to fly it. NASA will provide training materials for a two-year course being organized by the newly formed American Society of Aerospace Pilots. The group will offer home study supplemented by lectures and seminars—and it hopes to obtain a simulator to give pilots hands-on shuttle-flying experience.

Peking and Moscow: No Progress

China says it will "study" a new Soviet proposal to revive the border talks that stalled in 1979, but Western diplomats in Moscow see the Russian move as just an empty gesture. While the Kremlin was evidently hoping to capitalize on China's pique with the United States over its willingness to sell arms to Taiwan, the Soviets don't seem willing to offer the Chinese anything substantial. Last week the Soviet press carried yet another insulting blast against the "Peking ruling top crust" for its "adventurism." And in its latest issue, the official Soviet monthly International Affairs reviews the Sino-Soviet border issue with no hint of compromise.



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A Deserter's Deserts

When Congressman Gene Atkinson defected recently to the Republicans, angry Democratic colleagues vowed to strip him of his committee assignments. But now they are having second thoughts. Republicans in the House have threatened a floor fight on

guaranteed against journalistic intruders. The visit, which will be reminiscent of Jackie Kennedy's 1962 White House tour, will be part of an hour-long "personal portrait" of the President. There will be interviews with such longstanding Reagan chums as Ginger Rogers and Pat O'Brien. The show will be aired on Thanksgiving night.

FAY WILLEY with bureau reports

imes?

ng so deferential toward Republicans these
enate Majority Leader Howard Baker and
Bob Michel standing outside his office for
—even though he knew they were there.
Massachusetts friend who had arrived first,
chel to wait in the anteroom because "I've
ke to see."

icians

36 years, both major U.S. political parties
ventions west of the Mississippi. Looking
ratic chieftains believe their ticket won't
ey can break Reagan's lock on the region;
are said to be leaning toward a convention
p choice in 1980. The planning reflects the
the Sun Belt, which has replaced the Mid-
t as the critical Presidential battleground.

cho del Cielo

lined up a TV coup. During Thanksgiving
ill take her and ABC cameras on a walking
o, the California spread he has so jealously
guaranteed against journalistic intruders. The visit, which will be rem-
iniscent of Jackie Kennedy's 1962 White House tour, will be part of
an hour-long "personal portrait" of the President. There will be
interviews with such longstanding Reagan chums as Ginger Rogers
and Pat O'Brien. The show will be aired on Thanksgiving night.

FAY WILLEY with bureau reports

Fred of Arabia to the Rescue

One opposing lobbyist calls him "Fred of Arabia"—and like the legendary Lawrence, Frederick G. Dutton, 58, has made a second career battling for Saudi Arabian interests. Since 1975, the former aide to President Kennedy has been the chief legal representative for Saudi Arabia in the United States, handling everything from oil-contract disputes to the successful sale of 60 F-15 fighters to Riyadh in 1978. Now Dutton, who earns \$200,000 a year from the Saudis, faces his toughest campaign yet: trying to sell the AWACS package to a dubious U.S. Senate.

As a lobbyist, Dutton is an anomaly. He does not give lavish luncheons and he rarely visits Capitol Hill. Instead, he is what a Hill staffer calls a "force multiplier"—an offstage actor who paves the way for Saudi officials to present their case. Last month he persuaded Saudi Prince Bandar bin Sultan to meet with key senators—and he was host at a party for Bandar at his fashionable Washington home. "I like to keep things on a social level," Dutton says. He is adept at media management, says one lobbyist, getting "good press, even on lousy issues." Dutton produced a slick "Green Book" outlining the Saudi position on AWACS, and he

Dutton: Be patient

Bruce Hoertel



coined the phrase "Reagan or Begin" to crystallize the issue.

Long prominent in liberal Democratic politics, Dutton is a Stanford-trained lawyer who served as California Gov. Pat Brown's executive assistant, then as secretary to President Kennedy's Cabinet; later he played a key role in Robert Kennedy's Presidential campaign before becoming a lobbyist. His first Saudi link came in 1974 when Sen. J. William Fulbright suggested to one of Dutton's oil-company clients that the Saudis needed a liberal spokesman. Dutton waited for two weeks before Saudi officials would see him, and it was eight months before he was hired. The experience taught Dutton a valuable lesson in dealing with Arab leaders, he says: "Be patient."

During the tough campaign for the F-15 sale in 1978, Dutton took a more prominent role—and the bitterness that fight engendered persuaded him to keep a lower profile. Now much of his task involves explaining the senators' concerns to Saudi officials. He passed along Ohio Sen. John Glenn's idea for joint U.S.-Saudi manning of the jets to Riyadh and reported back that the Saudis were unwilling to accept such terms. Dutton has said from the start that the Saudis would make no major concessions on the sale. "If the package is defeated, it's defeated," Dutton says. Either way, Fred of Arabia will feel that he has done his job.

MELINDA BECK with JOHN J. LINDSAY in Washington

Tough New Plans For Illegal Aliens

For the better part of two centuries the United States invited the world's refugees to seek haven from poverty and persecution. But after the mayhem caused by the unwellcome mass migration of 140,000 Cuban and Haitian refugees to Florida last year, America may be preparing to shut the door. Last week the Reagan Administration sent Congress a set of proposed immigration bills highlighted by a request that the President be granted extraordinary powers to choke off the influx of unwanted immigrants—even if it means stopping and searching ships on the high seas for suspected cargoes of illegal aliens.

The Administration proposals, part of a major revision of American immigration law, would authorize the President to declare an "immigration emergency" after he determines that "a substantial number" of undocumented aliens—such as the influx of Cubans—were headed for the United States. The state of emergency would allow him to seal off harbors, airports and roads to keep the aliens out of the country, and call upon the Army, Navy and Air Force to help intercept vessels. Furthermore, the proposal would permit the detention of aliens awaiting deportation hearings in special camps regulated solely by the Attorney General and exempt from most environmental codes. Reagan also wants to sharply reduce the role of Federal courts in reviewing all decisions made by the Immigration and Naturalization Service on deportations and grants of political asylum.

The proposed emergency measures were

a surprising new element in the immigration-reform package outlined three months ago by Attorney General William French Smith. They came under quick attack from civil libertarians and immigration lawyers who argue that they violate both international law and constitutional guarantees. "I thought that world history had taught all of us to beware of 'emergencies' manufactured to abrogate individual constitutional rights," said Democratic Rep. Shirley Chisholm of New York. But Congressional staffers emphasized that the proposals were

Haitians at Miami Beach: Unwanted?

Randy Taylor—Sygma



a small part of a much-needed legislative package designed to alleviate America's growing immigration pains, and they would almost certainly be modified before being enacted into law.

A Formal Apology To Jimmy Carter

Last week, in a front-page news story, The Washington Post apologized to former President Jimmy Carter and his wife, Rosalynn, for a gossip-column item reporting that Blair House had been bugged during President-elect Ronald Reagan's stay before his Inauguration last January. The article, based on a letter of retraction and apology written to the Carters by Post publisher Donald E. Graham, said the newspaper's information had come from "a source whom we believed to be credible and reliable. We now believe the story he told us to be wrong and that there was no 'bugging' of Blair House during your Administration."

Graham's letter was published eighteen days after the newspaper's Ear column published a report saying "word's around among Rosalynn's close pals" that the Carters knew Nancy Reagan had expressed a wish that the Carters vacate the White House early because a bugging device had been placed in the Reagans' quarters. An outraged Carter threatened a libel suit and demanded a retraction—and the Post responded with an editorial conceding that "we find that rumor utterly impossible to believe." Carter still wasn't satisfied—but last week, after chiding the Post for its "tardy" apology, Carter announced he would drop his plans to sue.

1981 U.S. Gov't Report:

THE COMMERCIAL APPEAL MEMPHIS, TENN.

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INTERNATIONAL

moderate Arab regimes as Jordan and Saudi Arabia. He will also likely avoid any strong demands on Israel during the Palestinian autonomy talks—another fruitless session of which was held last week in Tel Aviv. “Mubarak’s need is to preserve the continuity,” said one State Department official. “It wouldn’t be wise to make any sudden changes now.”

Israeli Prime Minister Menachem Begin has given Mubarak his personal pledge that the Sinai withdrawal will be completed on schedule. But Israeli settlers in the Sinai have mounted an increasingly vocal campaign to keep their homes, and a major political uproar over the issue is looming within Israel. Begin has turned aside suggestions from the Reagan Administration for a “confidence-building gesture” toward Mubarak, such as an early pullout from the Sinai. “The strategic concern in Israel now is not to make things easier for Mubarak but to test his mettle,” says William Quandt, a Mideast expert at the Brookings Institution. “The Israelis do not see it as their job to make Mubarak’s job easier for him.” Isra-

el’s obstinance was reinforced last week by Israeli Foreign Minister Yitzhak Shamir. In a tough-talking policy speech in Tel Aviv, Shamir declared: “Following the assassination of President Sadat, pressure is being applied on Israel to make new ‘gestures’ to Egypt. It is Israel which must be soothed after the murder . . . If anyone wants to assuage Israel, he must not make it harder for us by applying pressures and making demands which we won’t accept anyway.”

Marking Time: Everyone—Egypt, Israel, the United States and the rest of the Arab world—seemed to be marking time until the Sinai is safely back in Egyptian control. Many Administration officials acknowledge privately that the Camp David formula has run its course and that some new approach to the Palestinian issue is needed. But, says one U.S. official, “there will be no new initiatives and no bold new directions” taken by Washington until next spring. The moderate Arabs also seem to be in no great hurry to woo Egypt back to the fold. “The moderates would love to have Egypt back,” says Rashid Khalidy, a Palestinian political scientist at the American University of Beirut. “It would

strengthen their position in the Arab world. But it’s too soon—even for them.”

In the long run, Mubarak’s most difficult challenge could be Egypt’s chronically ailing economy—the “Poland of the Mideast,” as one U.S. official puts it. Egypt is afflicted with all the familiar problems of the Third World—overpopulation, wide-scale poverty, unemployment, inflation and a lethargic bureaucracy. Sadat opened Egypt to Western investment, but only a small minority of Egypt’s 43 million people benefited from the contracts for high-rise hotels or from the flood of imported luxury goods. Sadat’s questionable strategy seemed to be to ignore the Egyptian economy and to gamble his popularity on finding a solution to the Middle East problem. “Sadat was buying time,” says a State Department official. Mubarak may also try to buy time as a peacemaker. Or he may turn instead to reforming Egypt’s economy and improving relations with the Arab world. The choice will ultimately determine his own future—and Egypt’s.

ANGUS DEMING with JAMES PRINGLE in Cairo, MILAN J. KUBIC in Jerusalem and CHRISTOPHER MA in Washington

A Lark in the Arc

Napoleon commissioned it, de Gaulle marched in its shadow—and it remains one of the crowning symbols of France. Besides, it’s *there*. So on a sleepy Sunday morning last week, when photographers and television crews just happened to be on hand, Parisian pilot Alain Marchand, 46, threaded a single-engine Morane “Rallye” through Paris’s Arc de Triomphe.

Raider of the Arc: Pilot Alain Marchand (right) . . .



His plane, christened Question Mark, approached the Arc at 100 miles per hour—and its 31.5-foot wingspan passed through with only 8 feet to spare on either side. Marchand thus became the second pilot to pull off the stunt (a biplane did it in 1919) and gained publicity for his favorite complaint: the rising taxes and other costs discouraging amateur flight. But Marchand violated a raft of Parisian overflight laws—and now must navigate his way through the courts on a wing and a *prêre*.

. . . zips through the portal with just 8 feet to spare

Photos by Dominique Charton—Gamma Liaison



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Regular: 8 mg “tar,” 0.6 mg nicotine—Menthol: 9 mg “tar,” 0.7 mg nicotine av. per cigarette, FTC Report Mar ’81

Cancer—A Progress Report

The invasion begins: deep in the bone marrow, a ragged-edged cell divides. Four days later the pair becomes four. The arithmetic is simple, the results devastating. Doubling again and again, the abnormal white blood cells leach through the marrow, pour into the bloodstream and then spread to other tissues. There, in a kind of pathological Gresham's law, they crowd out normal white and red cells. They consume nutrients and oxygen, sap the body's strength and make their victim increasingly vulnerable to infection. Acute leukemia has now taken hold.

The counterattack is chemical warfare. Shot into the victim's bloodstream, an array of complex molecules takes on the malignant cells, each chemical fighting a specialized part of the battle. Vincristine interrupts the growth process and paralyzes some of the cells in mid-division. A drug called 6-MP sneaks inside other cells, stopping them from making the DNA they need to reproduce. Methotrexate acts like a Trojan horse: shaped like a vitamin that the voracious cancer cell needs, it is quickly gobbled up. But once inside, the molecule proves as indigestible as a pebble and the cell chokes and dies. Under the chemical onslaught, the tumor cells falter, stop and then retreat, leaving millions of their dead behind.

Little more than a decade ago, the surgeon's scalpel and the radiologist's high-energy atomic beams offered the only means of

curing any form of cancer. Both treatments have continued to advance in sophistication and effectiveness, but the most dramatic progress has come in chemical treatment. Today oncologists, the doctors who specialize in cancer, dare to use the word "cure" for patients treated with drugs alone. "Now 50,000 to 60,000 people are curable with chemotherapy as a major avenue of treatment," says Dr. Vincent DeVita, the director of the National Cancer Institute. "And as we apply drugs to the more common tumors, the numbers keep going up."

In most types of cancer, experts reckon the patient is cured if he survives for five years after treatment and there is no trace of the disease. Cure rates have improved sharply in the past decade (chart), thanks in good part to advances in chemotherapy. More than 40 percent of the victims of cancer can be saved today, up from 25 percent 30 years ago. Until drugs came along, any child with leukemia was doomed; today more than half are cured with drugs. Most patients with Hodgkin's disease, a cancer of the lymph system, survive after treatment, even if their disease has reached the advanced stage. A decade ago, half the victims of testicular cancer, the most common malignancy among young men, died. Virtually all can now be cured with therapy. Even lung cancer, which last year claimed 105,000 lives in the United States, sometimes gives way to chemotherapy.

Such miracles come at a high price: drug therapy has a double edge that makes many people wonder if the cure isn't worse than the disease. Nearly all of the chemicals are toxic, and some of them can be lethal: some patients literally die of the cure before it can work. Patients often suffer agonizing side effects. And experimental drugs, usually used when nothing else has worked, can be even worse than established treatments be-

A chemical army is taking on tumors. The drugs are risky and painful—but cure rates are rising.

cause their precise benefits and dangers are not well understood. But whatever its ravages, chemotherapy—alone or in conjunction with surgery or radiation—is often the only alternative to certain death.

Conrad Gottlieb, a 63-year-old retired Baltimore public-relations consultant, faced that choice five years ago when the surgeons who removed his right lung gave him six months to live. Because of the drug treatments, he lost 50 pounds, his hair fell out, he vomited frequently and had to spend

most of his time in bed. Now back to a hefty 210 pounds and sporting a full head of black hair, Gottlieb no longer regrets the ordeal. "Every day is a bonus," he says. "If you get to live longer, life gets better."

The logic of chemotherapy is clear. The surgeon can remove only the tumor that he can see. But in many types of cancer, including those of the breast, the lung and the colon, colonies of cancer cells have often broken off from the main tumor by the time it has been discovered and have metastasized—crept undetected to take hold in other parts of the body. Since drugs can travel through the bloodstream to attack these metastases, an increasing number of patients are put on chemotherapy almost as soon as they come off the operating table. Moreover, drugs are the only way of dealing with such cancers as leukemia, which by their very nature are too widespread to be surgically removed.

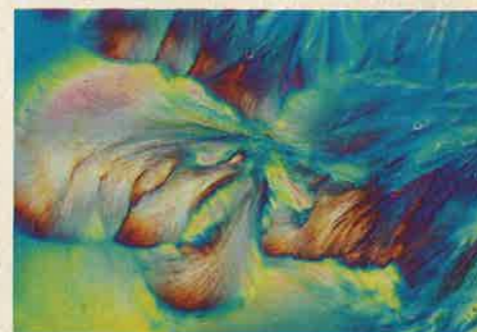
Cancer is a formidable foe, and it is unlikely that a single "magic bullet" will ever be found to defeat it—at least until basic research discloses just what goes wrong in the complex chemical machinery of normal cells that makes them grow beyond their designated bounds and invade the body. In the meantime, new drugs and more sophisticated ways of using them are developing rapidly, promising to make chemotherapy both safer and more effective. Equally important, experts are exploring wholly new kinds of treatment. They include immunotherapy, ways of stimulating the body's own disease defenses to attack cancer cells. The American Cancer Society is sponsoring a \$6.8 million study of interferon, a natural antiviral substance, as a weapon against cancer. The most recent development is per-

Peter Angelo Simon



Two ways to fight malignancy: A boy receives chemotherapy at Sidney Farber Cancer Institute; a woman gets radiotherapy from Stanford's linear accelerator

John McDermott



Photos by Phillip A. Harrington

Crystals of hope: Magnified 150 times (clockwise from top) vincristine, Cis-



platin, 6-MP and Cytosan offer patients life—at 'a small price' in torment



THE ODDS ON SURVIVAL

Cancer patients are often considered cured if they survive for five years after treatment without a recurrence of the disease—and the number of such survivals has risen dramatically.*

Type of cancer	1970	1980 (projected)
Hodgkin's disease	61%	80%
Lung	10	15
Breast: local	86	90
disseminated	58	73
Stomach	12	20
Bladder	65	70
Colon	47	52
Prostate	60	65
Testicular	68	90
Uterine	69	73
Melanoma (skin)	70	75
Leukemia: chronic	35	40
acute adult	3	15
children	35	55

*Figures are for whites only. Black patients average 5 to 10 percent lower survival rates for all tumors, apparently because they often don't get adequate treatment.





Bernard Gotfryd—NEWSWEEK

Holland and Mt. Sinai colleague: In hopeless cases, don't extend the dying process

haps the most exciting yet: substances known as monoclonal antibodies are made in the lab to seek out and react with malignant cells. They may someday be used routinely to carry drugs or radioactive isotopes directly to tumors without harm to healthy tissues. "There never has been a better time for investigating the cure for cancer than now," says Dr. Emil Freireich of the University of Texas M.D. Anderson Hospital and Tumor Institute in Houston.

The era of cancer chemotherapy began during World War II. Dr. Charles B. Huggins of the University of Chicago, who later won a Nobel Prize for his work, showed that the female hormone estrogen slowed the growth of prostate cancer in men. The next development came out of the war effort itself. A medical team at Yale, looking into the effects of chemical-warfare agents, found that nitrogen mustard, a substance related to mustard gas, attacked lymph tissues. After animal experiments, the researchers gave nitrogen mustard to a patient with a cancer called lymphosarcoma and found that it shrank the tumor. Subsequently, they began using it to treat lymph cancer; the drug remains one of the standard therapies for Hodgkin's disease.

Remission: The next major step grew out of research on the role of nutrition in cancer. Dr. Sidney Farber of Boston Children's Hospital observed that an excess of folic acid, one of the B vitamins, seemed to promote the growth of leukemic cells. Working with Yellapragada Subbarow of Lederle Laboratories, Farber began testing drugs that interfere with folic-acid metabolism. One of them, aminopterin, produced complete remissions in ten of sixteen children dying of acute leukemia. Although the remissions were temporary, the treatment offered the first real hope of bringing leukemia under control. A similar "antimetabolite," methotrexate, proved even more potent, and it is still widely used in fighting cancer.

Encouraged by these early successes, the

National Cancer Institute in the 1950s set up a massive program at major U.S. medical centers to develop anti-cancer drugs. Increasingly, the development of drugs relied less on serendipity than on new knowledge about the cancer cell. In research supported by the American Cancer Society, for example, Charles Heidelberger at the University of Wisconsin designed one of the most widely used anti-cancer drugs, 5-fluorouracil (5-FU), molecule by molecule. There are now about 30 anti-cancer drugs approved by the U.S. Food and Drug Administration and used routinely, as well as hundreds more still in the experimental stage. The drugs fall into four main categories:

■ **Alkylating agents.** The genetic material, or DNA, of a cell is made up of molecules, called bases, that must be duplicated and precisely paired when the cell divides.

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Alkylating agents interfere with the orderly pairing process and prevent successful division. Some of the prominent drugs in this family: Cytosan, L-PAM and Myleran.

■ **Antimetabolites.** These compounds chemically resemble vitamins or other nutrients and are therefore absorbed by the cell. But once inside, they disrupt the cell's metabolic machinery. Such agents include methotrexate, 5-FU and 6-mercaptopurine (6-MP). 5-FU, for example, resembles uracil, a substance the cell needs to make DNA. It is not, however, a proper substitute and effectively blocks DNA synthesis.

■ **Antibiotics.** Some of these were discovered in research for new drugs to fight infections. They disrupt the synthesis of RNA, a substance the cell needs to make essential proteins. Two leading antibiotics in cancer therapy: bleomycin and Adriamycin.

■ **Steroids.** It isn't precisely known how these hormones, which include prednisone and estrogen, work against cancer. They are believed to prevent the production of proteins or other key enzymes.

Some of the anti-cancer drugs don't fall into general categories. Vinblastine and vincristine, derived from the periwinkle plant, prevent the cell from doubling. The drug L-Asparaginase is an enzyme that destroys asparagine, an amino acid that some cancer cells can't make for themselves and must draw from the bloodstream. Normal cells, which synthesize the asparagine they need, are apparently unaffected by the drug.

Most of the drugs must be given intravenously, because they might harm the stomach or be destroyed by digestive enzymes if taken orally. If an infusion is required steadily over a period of days, the patient usually is hospitalized. However, most treatments

can be given on an outpatient basis, and some patients wear drug pumps on their belts that deliver the drugs while they go about their daily routine. In order to increase the amount of drugs reaching the tumor, some physicians administer them directly into the particular blood vessels supplying the cancer.

Acquiring an arsenal of effective drugs is a formidable task. But learning how to use them most effectively has been even more challenging for the oncologists. In the early days of chemotherapy, physicians couldn't understand why cancers such as leukemia reacted quickly to drugs while "solid" tumors, like cancer of the colon or lung, didn't respond. In the 1960s, Howard Skipper and Frank Schabel of the Southern Research Institute in Birmingham, Ala., made some fundamental observations about cancer that answered such questions and laid the foundations for better use of drugs. "Skipper and Schabel put the area of science squarely behind chemotherapy and influenced it in a major way," says Dr. Emil Frei III of the Sidney Farber Cancer Institute in Boston.

Supply Lines: Most anti-cancer drugs interfere with cell division in some way, including the synthesis of DNA. Skipper and Schabel made the common-sensical observation that the tumors most vulnerable to attack are those whose cells are dividing most rapidly and synthesizing DNA at a fast rate. Leukemia and lymphatic cancers are among those. The solid tumors, on the other hand, have low growth rates. The larger a tumor gets, the slower its cells divide, Skipper and Schabel noted. And many cells seem never to divide at all. Like an army that has outdistanced its lines of supply, the cells have trouble getting nutrients from the blood and become dormant. "Cells that aren't making DNA just whistle at drugs," says Dr. Isaac Djerassi of Mercy Catholic Medical Center in Philadelphia.

In the early stages, however, even solid tumors grow rapidly and make DNA. Thus oncologists learned to use drugs early in the course of the disease and not as a last resort. Now many patients who undergo surgery for cancer of the bowel, bladder, breast and other solid tumors routinely get "adjuvant" chemotherapy—the immediate administration of drugs to hit the small, fast-growing colonies of cells that have spread from the original tumor.

Skipper and Schabel made another crucial observation that influenced chemotherapy. Oncologists had assumed that if a given dose killed a certain number of cancer cells, each succeeding dose would kill the same number until all were destroyed. But it isn't that simple. The Alabama investiga-

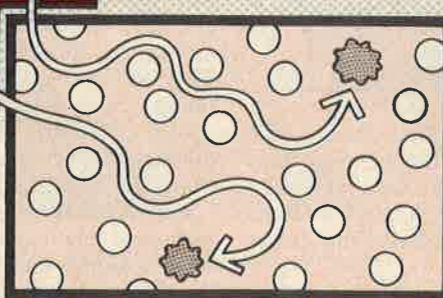
tors showed that each dose kills the same fraction of cells, but not the same finite number. A drug that kills 90 percent of a tumor will always leave 10 percent behind with each dose until the final cell is killed. This explained why patients whose symptoms had disappeared suddenly relapsed, and it taught oncologists they had to extend the period of therapy far longer.

Early on, oncologists also learned that treatments failed because tumors become resistant to drugs, just as staph bacteria become immune to penicillin. Tumors, they

THE TUMOR HUNTERS

In a promising new technique, monoclonal antibodies may be used to seek out tumor cells and deliver killer drugs precisely on target.

1. Tumor cells from cancer patient are injected into mouse, which produces antibodies against cancerous cells.
2. Cancerous cells are removed from second mouse.
3. Antibodies and malignant mouse cells are fused, isolated and cloned in cultures.
4. Monoclonal antibodies combined with toxic drugs are injected into patient to hunt down and attack tumor cells.



Christoph Blumrich—NEWSWEEK

found, contain some cells that are vulnerable to drugs but others that are not. Before they understood the resistance phenomenon, doctors usually administered only one kind of drug at a time. But the single-drug regimen allowed resistant cells in the tumor to proliferate until a cure was out of the question. Now most chemotherapy uses several drugs, together or in sequence, so that cells immune to one drug will succumb to one of the others.

The long-sought goal of cancer specialists has been to find drugs that destroy cancer cells but leave normal cells unharmed, eliminating the dreaded side effects of chemotherapy. Unfortunately, such drugs remain elusive. "There are no drugs specific to tumors," notes Dr. James F. Holland of New York's Mt. Sinai Medi-

cal Center. Until such drugs are found, side effects will remain a major problem. While under treatment, for advanced Hodgkin's disease, Martin Soss of Monroe, N.Y., dropped from 205 pounds to 106, suffered problems with his vision and frequent headaches. "I always took a bus with a bathroom," he recalls, "because I didn't want to take the chance of throwing up with no place to go." At Duke University, as many as 50 percent of patients miss appointments or delay treatments because of nausea and vomiting. The ordeal can be so devastating that some people literally choose to die rather than continue chemotherapy.

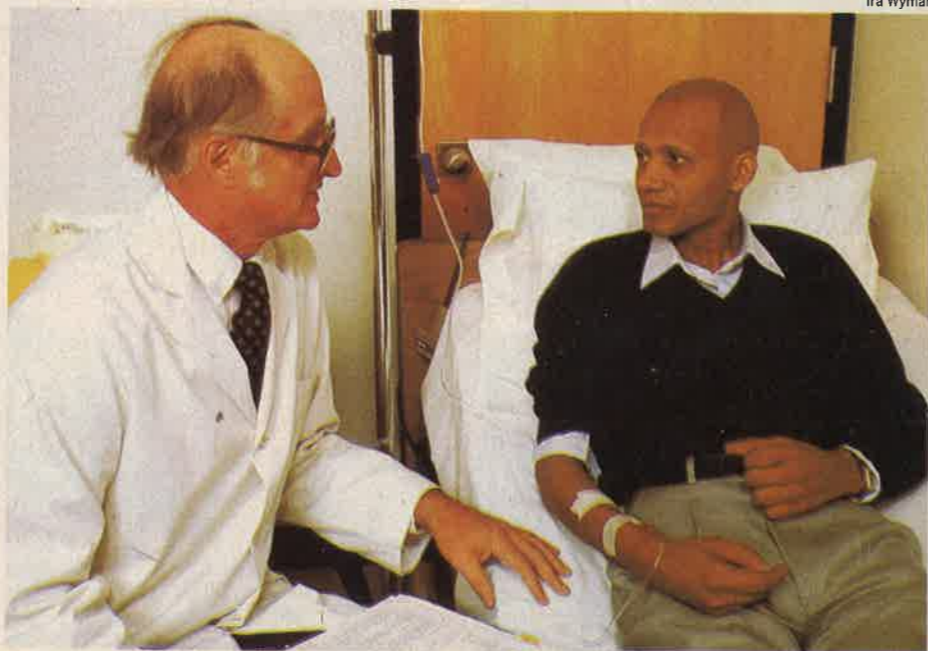
Nausea, loss of appetite, hair loss and diarrhea are among the most troublesome side effects to patients. But more serious is the tendency of many drugs to destroy white blood cells, reducing the body's resistance to infection, as well as platelets—blood components needed to prevent bleeding. The antibiotic Adriamycin can damage the heart muscle and vincristine can harm nerve tissue. Finally, chemotherapy itself can cause cancer: about 5 percent of patients treated for Hodgkin's disease develop leukemia about ten years later.

Overzealous Treatment: In view of the side effects, therapists have to tread a fine line between the benefits and risks of chemotherapy. And critics often question whether patients with heretofore incurable cancers aren't being used as unsuspecting guinea pigs in the testing of experimental drugs. Some oncologists do stand guilty of overzealous treatment. "They don't use good judgment,"

says Djerassi. "They try a new drug, get three months' additional survival and write a paper. In the process many hundreds of people pay dearly."

But most specialists try to walk the ethical tightrope of drug treatment with the patient's welfare in mind. Freireich of M.D. Anderson uses standard therapy when the patient's chances of recovery are better than 40 percent. If the chance is less, he might use a newer regimen—after a full explanation to the patient of its pros and cons. "I don't experiment on anybody," he says. "I save the drugs with the highest risk for patients who are in the worst shape. They take the risks when they have the most to benefit." However, if the case is hopeless, adds Holland, "there is absolutely no requirement to turn every hair merely to extend the dying process." Doctors, of course, can be cold, unfeeling—and arrogant. Convinced that they know best, some think it's unnecessary to explain their decisions. Critics also charge that unscrupulous experimenters exploit the willingness of an untutored patient to grasp at any straw. On the contrary,

Frei with Hodgkin's disease patient: The ethical tightrope of drug treatment



Ira Wyman

MEDICINE

oncologists say, a common problem is the patient with no chance of being helped who insists on treatment. "You wind up with a circus in which what you're doing is unethical because there isn't any good treatment," says Frei.

What worries many experts is relatively inexperienced therapists who cut down the drug regimen in order to reduce the risk of side effects. "A slight alteration in chemotherapy and you throw away the cure rate," says DeVita. More often than not, the pa-

tients who are helped believe that the misery of therapy was worth it. "The side effects are blown way out of proportion," says Gottlieb. "Considering the option, they're a small price to pay."

Many improvements have been made recently in dealing with side effects. Marijuana derivatives and other drugs help curb nausea. At the University of Arizona, doctors have reduced hair loss in patients receiving Adriamycin by fitting them with caps filled with chemicals that cool the scalp and protect the hair follicles. To overcome more serious side effects, patients can now

be given transfusions of platelets and white cells, as well as special intravenous diets that prevent severe malnutrition and metabolic imbalances.

Slowly but steadily, chemotherapy is making gratifying inroads in the treatment of solid tumors. Nowhere is this clearer than in breast cancer, still the leading cancer killer among women. Even if the surgeon seemed to have removed the tumor completely, breast cancer would recur within five years in half the cases. But chemotherapy following surgery has changed this gloomy outlook. Dr. Gianni Bonadonna of

the National Tumor Institute of Milan, Italy, recently reported a trial of three drugs in which 75 to 79 percent of the patients remained disease-free five years after mastectomy. "We're beginning to see the impact of adjuvant chemotherapy in a common tumor," says DeVita.

Even women with advanced breast cancer sometimes benefit from drugs. Mrs. Betty McFadden of Newburgh, N.Y., lost both breasts to cancer; after doctors discovered that it had spread to her liver, she was told she didn't have long to live. After chemotherapy, however, she has remained well for the past two years. "No one is saying that I'm cured, including myself," she says. "I'm just thankful for every single day, for every day more than I expected to have."

Bone cancer was once curable only by total amputation of the involved limb; even so, the vast majority of its victims died. Now up to 90 percent of patients survive for as long as five years after receiving high-dose methotrexate or Adriamycin. Sen. Edward Kennedy's son, Teddy, lost his right leg, but he is now a strapping adult nearly a decade after drug treatment for bone cancer. Encouraged by the chemotherapy results, some physicians are beginning to treat the disease without total amputation, removing only sections of diseased bone and replacing them with grafts or metal rods.

Chance: But chemotherapy can claim no such successes yet for many of the common solid tumors. Surgery alone is the best chance for victims of colon cancer, if it is detected early. By the time they are spotted, cancers of the lung and pancreas are usually too far advanced for a cure, although chemotherapy is now often tried. Only in "oat cell" carcinoma, one form of lung cancer, have drugs shown substantial promise.

The search for better anti-cancer drugs goes on at a rapid pace. But the effort is both frustrating and expensive. Only one out of every 5,000 experimental compounds proves effective enough in animal testing to be tried on humans, and the development of such a drug costs about \$1 million. Most of the new drugs are molecular variations of ones already in use. For example, researchers are dabbling with hundreds of versions of Adriamycin, hoping to find one that is as effective but doesn't pose the risk of heart damage.

Another way to improve treatment is to find more sophisticated ways to select the right drugs for the right patient. Oncologists now can detect "estrogen receptors" in some kinds of breast tumors in the lab, thus pinpointing the women who will best respond to chemotherapy. Only 10 percent of women whose tumors don't have estrogen receptors have a chance of being helped, compared with 65 to 70 percent of women whose cancers do. At the University of Arizona Cancer Center, Dr. Sidney Salmon has

devised a lab test that tells in advance how well patients with other kinds of cancer will fare. Specimens of their tumors are grown in test tubes and exposed to various drugs; after about two weeks the results are microscopically compared. In 40 patients with ovarian cancer, according to one of Salmon's studies, thirteen of 21 patients whose tests suggested a good response actually did well when treated with drugs. In a group of similar patients randomly given chemotherapy, only three or four would have been expected to get good results.

Some of the most exciting possibilities are offered by drugs that work in entirely different ways from the conventional ones. One such approach is immunotherapy, using drugs that cause the body's immune system

The widely ballyhooed drug interferon stemmed from immunological research. Discovered in the 1950s, it is a protein produced by body cells to help fight off viral infections. In cancer, researchers think it fastens on to cells and causes the release of enzymes that inhibit growth. And because it is a natural substance, experts hope the side effects will be limited. But so far, this is mostly theory; until recently, large-scale testing of interferon hasn't been possible because it could be extracted only in minute quantities and at great cost from donated white blood cells. The emergence of recombinant DNA technology, in which common bacteria can be programmed genetically to manufacture quantities of proteins, has only recently made it possible to obtain enough interferon for cancer research.

Pure: The results of earlier tests involving "impure" white-cell interferon have been modest but encouraging. Dr. Elliott Osserman of New York's Columbia-Presbyterian Medical Center found that interferon had some effect in patients with multiple myeloma, a blood cancer, and at the University of Wisconsin, eleven out of 26 breast-cancer victims showed signs of tumor shrinkage. Just last week, Dr. Jordan Gutterman of Houston's M.D. Anderson reported the first results using interferon made in the pure state by recombinant DNA techniques. Although intended mainly to ascertain toxicity, the tests showed that the growth of tumors in sixteen patients with advanced disease, treated at Houston and Stanford University Medical Center, was definitely slowed down by interferon. Since interferon doesn't seem to work during the active stage of cell division, Gutterman suspects that it might prove especially useful in treating slow-growing tumors.

Monoclonal antibodies are stirring even greater interest among researchers than interferon. The surfaces of viruses, bacteria and even normal cells contain specific molecules that are called antigens. When they enter the body, these molecules trigger certain blood cells to produce antibodies, proteins that lock onto the antigens and render them harmless. All vaccines are made from antigens that induce the formation of antibodies in advance to ward off infectious diseases. Six years ago Drs. César Milstein and Georges Köhler of the British Medical Research Council developed a technique for growing antibodies in quantity in the laboratory.

First, researchers inject a mouse with an antigen—for example, a human cancer cell. The mouse then makes antibodies to different components of the cancer cell, including abnormal proteins associated with cancer itself. The investigators remove the mouse's spleen, where much of the antibody production occurs, and extract its cells. They then fuse these cells with cancer cells from an-



Mario Ruiz

At a Ronald McDonald House: Making treatment bearable

The Emotional Battle

His body has betrayed him: somewhere inside, deviant cells are trying to kill him. The people he loves are hiding things from him and his friends are dropping away. So is his hair. He vomits constantly. He has pain. He may be mutilated; he might become a vegetable. And all this makes an emotional problem that can be as hard to treat as his cancer itself.

Dr. Jimmie Holland, chief of the psychiatric service at New York's Memorial Sloan-Kettering Cancer Center, believes the patient's fears can be summed up in five D's: Death, Disfigurement, Disability, Dependence and Disruption of relationships. "How a person deals with them," she says, "is really what coping with cancer is all about." And to help patients cope, cancer institutes across the country are coming up with a growing array of counseling services, special accommodations for chemotherapy outpatients and volunteer aid programs designed to make treatment tolerable. For most specialists, the first rule in helping a patient cope with the fear of death is to tell the truth. However, the physician tempers the bad news with whatever hope can be offered by treatment and avoids overwhelming the patient with facts that he isn't ready to grasp. "Within a few minutes of seeing a patient for the first time, you develop a rapport, and his reactions guide you as to how much information to give," says Dr. Timothy Gee, a Memorial hematologist.

Once patients recognize that their cancer may not be curable, the next task is to get on with whatever remains of their lives. At

Memorial Sloan-Kettering, they are counseled by volunteers who themselves have been treated for cancer. "I tell patients that death was a reality before they got sick," says Bob Fisher, a volunteer with chronic leukemia. "We still have to look both ways when we cross the street." One leukemia patient who was persuaded to make the most of her life went ahead with her wedding plans and died shortly after her marriage. An elderly patient faithfully followed the oral hygiene his dentist had prescribed right up to the hour before his death.

Next to death, disfigurement is the hardest reality for many patients. But counseling helps a surprising number to adapt well. "Mourn the body you had and lay it to rest," Fisher tells patients. "Then find out what you are capable of doing." A patient who had been an avid skater before his leg was amputated for bone cancer now uses a skateboard. A girl who also lost a leg to the same disease switched from running to playing the flute. Patients also learn to face the possibility that their disability may cost them their jobs. A man with lung cancer was forced to give up driving a cab, but went back to school and studied accounting. A leukemia victim who couldn't stay at his factory job started a camp for children taking chemotherapy.

Even while in the hospital, patients can learn to make do for themselves and avoid the fear of dependency on others. In large part, this means accepting some responsibility in treating the disease. The volunteers show patients how to monitor their intravenous tubes for signs that fluid is escaping from the vein. They advise them to make their own arrangements for such things as special equipment or home care. They urge patients to ask the staff about their medication and what it is for. "What a difference in dignity it makes to be fully aware and taking care of things yourself," says Fisher.

Punishment: Cancer poses a formidable disruption in family and social relationships. Marriages break up. Family members become angry—and then guilty about their anger—because of the burden the disease places on them. Youngsters sometimes endure further suffering because they believe their cancer is a punishment for displeasing their parents. Memorial Sloan-Kettering houses many of its young patients at a nearby Ronald McDonald House, one of 26 such facilities around the country established by the McDonald Corp., where children stay with their families while getting treatment. Relatives and friends are advised to face the fact of cancer as squarely as the patient does. "Talk about it if you want, and if the patient doesn't wish to discuss it, he won't," says Holland. "This is not a time to keep secrets." If friends drop away, patients are given a straightforward piece of advice: make new ones.

Given their often dire prospects, many cancer patients cope amazingly well. Facing death, they gain a new appreciation of things in life that others take for granted. "I see many people become stronger than before, with enormous emotional growth," says Holland. "I'm very impressed with how strong the human character is."

MATT CLARK with DAN SHAPIRO in New York



Steve Wilcoxson

Gottlieb: After the ordeal, life gets better

to attack cancer just as it fights off infections. The concept is based on two theories. First, cancer cells can be perceived by the immune system as "foreign" and, with proper help, rejected. The second posits that cancer victims have lost their natural powers of rejection because of their debilitating disease. Neither theory has been proved, but researchers are forging ahead.

One of the earliest tries at immunotherapy was the injection of a substance that triggered a general immune reaction. Dr. Donald Morton of the University of California, Los Angeles, found that the skin tumors of malignant melanoma, one of the most lethal cancers, shrink significantly when injected with BCG, a vaccine widely used against tuberculosis. White blood cells invade the tumors in response to the vaccine and destroy them by creating inflammation.

other mouse with myeloma. These tumor cells are used because they are immortal: they will continue to divide ad infinitum and make the fused hybrid do the same. Finally, the scientists select the hybrid cells that are producing the particular antibodies they want and encourage them to reproduce, or clone, in separate tissue cultures. The products are called monoclonal antibodies because each comes from a single line, or clone, of cells.

Lethal Doses: How do they offer hope in cancer therapy? If special antigens can be found on cancer cells that are not present in normal cells, the lab-produced antibodies would home in on tumors without damaging normal tissue. Although such antigens have not yet been identified, monoclonal antibodies made from cancer cells have shown some effect in treating leukemia and lymphomas, reducing the number of circulating tumor cells in the bloodstream. Antibodies could also be tagged with radioactive substances or chemicals to carry lethal doses directly to cancer cells while bypassing normal cells. "Monoclonal antibodies have a precision and elegance about them that is remarkable," says Dr. Henry Kaplan of Stanford.

Surgery and radiation remain major weapons against cancer. Combined with drugs, as in breast cancer, surgery may become more limited and less disfiguring. By itself, radiotherapy is an increasingly potent tool. Linear accelerators, which hit tumors with 20 million electron volts, four times the dose of earlier machines, provide deeper penetration and a more precise beam that does less damage to surrounding normal tissue. The accelerators have improved survival rates for some cancers of the nose and throat from 20 to 50 percent. And radiotherapy remains one of the best means of handling Hodgkin's disease.

Conquest: Despite the advances of the last decade, cancer will still claim the lives of more than 400,000 Americans in 1981. The conquest of smallpox, polio and measles—which took centuries to accomplish—was simple by comparison to the war being waged against cancer. They were simple diseases, caused by viruses that could each be stopped by single vaccines. Cancer is 100 different diseases, one for every type of body cell that has the perverse capacity to break ranks and become malignant.

But progress is coming, and will come, with deliberate speed. Oncologists will find better ways to use current drugs, and basic research into the secrets of the cancer cell will suggest new and more dramatic compounds. And slowly, even the most recalcitrant tumors—those of the lung and the bowel—may become as treatable as leukemia. Granted, there is a long way to go, but the oncologists are confident of the outcome. Says DeVita: "We're seeing the last little pieces of the chemotherapy puzzle falling into place."

MATT CLARK with DAN SHAPIRO, DAVID T. FRIENDLY in Los Angeles and bureau reports

SCIENCE

The Physics of Chemistry

A funny thing happened on the way to this year's Nobel Prizes in Science. The chemistry award honored two men who used quantum mechanics—the bedrock of modern physics—to explain how molecules form. And the physics award went to three researchers who discovered how to read the chemical signatures of such complex mixtures as pollutants and rust. But if the \$180,000 prizes announced last week showed that physics and chemistry meet in the subatomic world, they also suggested that Eastern and Western science recently have been poles apart. The work of Japanese scientist Kenichi Fukui, who shared the chemistry award with Cornell University chemist Roald Hoffmann, went largely unappreciated in his own country. "The Japanese are very conservative when it comes to new theory," he said last week. "But once you get appreciated in the U.S. or Europe, then the appreciation spreads back to Japan."

Hoffmann and Fukui, of Kyoto University, based their research on an updated image of the atom. The old model



Kenichi Fukui

tions. His "frontier orbital theory" allows chemists to all but ignore the inner electrons and, by calculating the shape and density of the outer electron clouds, roughly predict how molecules will combine.

Rules: Hoffmann, 44, independently extended the theory that Fukui had formulated 25 years ago to devise his own rules that tell whether a chemical reaction is possible. "If we have the orbitals of the starting molecules and the final products, we can make a go/no go decision about the reaction," he explains. Those rules now allow chemists to choose the right pathway to new drugs.

Fukui's own Japanese colleagues ignored his theory—possibly, he says, because "there aren't enough scientists in pure chemistry here to apply it." Indeed, Japan's technological excellence sometimes obscures the country's relative weakness in pure scientific research. "We Japanese are very strong in learning and understanding when we have a clear target in view, but perhaps not quite so strong when it comes to finding a new direction," recently wrote Makoto Kikuchi, of the Sony Re-

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ultraviolet laser light, which allows scientists to explore everything from how gases explode in a combustion engine to the movement of molecules in living tissues. And that may foreshadow Nobel Prizes yet to come: by looking at life on an atomic level, scientists are slowly drawing biology, too, into the realm of atoms and electrons.

SHARON BEGLEY with bureau reports

BOOKS



Nixon deputizes Elvis as a narcotics agent in 1970: Dilaudid and Dreamsicles

The King of Hearts

Elvis. By Albert Goldman. 598 pages. McGraw-Hill. \$14.95.

The throne room looks like this: a crimson carpet covers the floor, black tufted suede pads the walls and seals the windows, a color television flickers soundlessly before the throne itself—an immense 9-by-9 double king-size bed with a headboard of black quilted Naugahyde. On one side stands an easel holding a huge photo of Mom, on the other a portrait of Jesus. In regal repose between these holy figures reclines the King himself: at 42, a tub of lard, propped up on a pillow to consume a royal snack of Eskimo Pies, Fudgsicles, Dreamsicles and Nutty Buddys before receiving a dose of Dilaudid, his drug of preference and a powerful synthetic opiate, normally used to ease the pain of terminal-cancer patients.

So passed the last days of Elvis Presley, the once and future King of rock 'n' roll. To read about his life is to enter a surreal fun house where the American Dream of plenty turns into a carnival of gluttony. In the beginning, he was the Hillbilly Cat, "The Nation's First Atomic-Powered Singer," the kid with the blue suede shoes, the nonchalant sneer and piled-high pompadour, the singer with the sexy hips, sweet smile and wailing tenor, playing astonishing music that shook and shimmered and made parents nervous—a hint of freedom on the family airwaves. By the end he was a risible fat slob, living in a fantasy land of infantile amusements, collecting guns and badges, indulging in whimsical spending sprees, consuming epic quantities of cheeseburgers and prescription drugs—a mad recluse, the Howard Hughes of pop music.

Albert Goldman, his latest biographer, avers that "there is absolutely no poignance in this history"—and so he savors the sheer vulgarity of Presley's long decline. For a book of this heft, claiming to be the "definitive biography," there is surprisingly little fresh news. Interviews with girlfriends do reveal for the first time pajama parties in Hollywood and a man titillated by teenyboppers frolicking in white panties. And we get the most vivid account yet of Presley's comic 1970 meeting with Richard Nixon, who deputized Elvis as an agent-at-large for the Bureau of Narcotics and Dangerous Drugs. Though no transcript of their talk has been made public, Goldman nonetheless "reproduces" their dialogue—a flimsy bit of fictional license he allows himself throughout this slipshod narrative.

Gambler: The best parts of the book involve Col. Tom Parker, the crafty huckster in charge of Elvis Presley's career since 1955. In a neat feat of detective work, Goldman discovers that Parker isn't quite the star-spangled heir to P. T. Barnum he has pretended to be. He was born not in West Virginia, as commonly assumed, but in Holland; he immigrated, perhaps illegally, to the United States in 1927, when he was 18 years old. A compulsive gambler and colorful ex-carny, Parker, it now seems, may have taken a gullible Elvis Presley for millions of dollars, largely through preposterously high management fees and a suspiciously modest contract with the International Hotel in Las Vegas, where Elvis worked biannually and where the colonel could enjoy his long line of credit at the gaming tables.

If the colonel excites a certain admiration

in the author, Elvis Presley and his milieu—the world of poor Southern whites—seem to fill Goldman with nothing but disgust. "The Presleys were not an ordinary family," he explains. "They were hillbillies, on familiar terms with the weird." Like a smug Victorian imperialist, Goldman sniffs at the curious native customs: the young Elvis enjoyed hearing quartets harmonize at gospel sings, "one of those parochial institutions endemic to the South." His religious fundamentalism represented a "set of superstitions"—"the corny old saws of the hillbilly faith healers." Since the "little cracker boy" was never circumcised, Goldman speculates that "he saw his beauty disfigured by an ugly hillbilly pecker." Rarely has a writer lavished such contempt on his subject's life: Elvis was classic "sucker bait," a "freak attraction," his music the product of "ignorance and inexperience." His art consisted of "broad, coarse effects that were appropriate to all the broad, coarse sensibilities in his audience."

Because Goldman so relentlessly belittles the Presley "Myth" (always with a capital "M"), he never properly explores it, resorting instead to lame comments about America's "deep atavistic yearning for royalty." President Jimmy Carter came closer to the mark when he said after Presley's death that "he was a symbol to the people the world over of the vitality, rebelliousness and good humor of this country." If you watch one of Presley's early television performances or play any one of his best early records, like the joyful "That's All Right (Mama)" or the preternatural "Mystery Train," you can still bring that symbol back to life. Elvis Presley was, after all, the most exciting pop singer of his generation—even if Albert Goldman can't figure out why.

JIM MILLER

Days of Rage

Second Life. By Stephani Cook. 377 pages. Simon and Schuster. \$13.95.

May I try to win you over by saying right off that I didn't want to read Stephani Cook's book any more than you will when you hear what it's about—but that I was fascinated and shaken by it. "Second Life" is such a medical horror story that one keeps seeking reassurance from running heads at the top of its pages: "Summer 1971," for instance. If these terrible things happened that long ago, and she's here to tell about them, there must be a happy ending. Medically there is. After the initial suspicion that her symptoms were merely neurotic, after an unnecessary radical hysterectomy and debilitating, unavailing open-heart surgery, a rare form of cancer was discovered that could have been diagnosed from a urinalysis. She was given chemotherapy, in its primitive, punishing, early experimental form, and she was cured.

But "to be cured is not necessarily to be healed," she says, and the most original and hurtful part of her book is a searching in-



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EDUCATION

Trouble for a China Hand

Steven Mosher, 33, is a sandy-haired jack-of-all-trades and master of several. He has an M.A. in biology and oceanography from the University of Washington. He has two more master's degrees—in East Asian studies and anthropology—from Stanford University. In 1979 he was pursuing a doctorate in anthropology at Stanford when he was chosen as one of the first American social scientists to do fieldwork in China. It was a remarkable opportunity, given China's 30 years of seclusion from the West. But during his ten months in the country, Mosher, by several accounts, adopted a freewheeling style that smacked more of Indiana Jones than Margaret Mead. His behavior was criticized by both Chinese officials and fellow American academics, and as a result he may have endangered his own promising career—and strained the program of Sino-American academic exchange.

Mosher went to China on a grant from the Committee on Scholarly Communication with the People's Republic of China. His intention was to do fieldwork in Guangdong Province, the ancestral home of his Hong Kong-born wife (from whom he is now divorced). "It was a general study," Mosher says, "—education, welfare, economic organization, crime rates, that sort of thing."

Mosher, whom Stanford colleagues describe as "very bright," was successful in obtaining unusually detailed information, including material on birth control and abortion. As far as the Chinese were concerned, he was much too successful. By the time he left the mainland in June 1980 to work on a separate research project in Taiwan, they were grumbling that he had engaged in inappropriate activities.

Restricted: No one has made any official complaints about Mosher. But the Chinese did speak privately about him to several American scholars, including John Jamieson, who was the academic-affairs adviser in the U.S. Embassy while Mosher was doing his fieldwork. According to Jamieson, now an East Asian specialist at the University of California at Berkeley, the Chinese say Mosher imported a van into the country without permission and attempted to drive it through restricted areas. The Chinese also allege that he got some of his information, including details on public security forces, by leaving the van with the villagers as a gift, and that he tried to take rare coins out of the country on one of his trips to Hong Kong.

Mosher says he is not guilty on all counts. "I wish Peking would either come out and say formally whether they think there's any substance to this or else cease and desist," complains Mosher, who is still doing research in Taiwan. "The allegations are totally baseless." Mosher insists that he had permission to import the van and that he informed local officials from the beginning that he would be leaving it—so they had no incentive, he says, to divulge any secrets. He also says that he bought the coins from a government unit and that he declared them to customs on his departure.

In early 1980, NEWSWEEK has learned, Mosher became concerned about carrying



The Sunday Times Chinese Weekly

Taiwan magazine article with one of Mosher's abortion photographs

his research material safely out of China. Early in his stay, according to an American official, Mosher had alerted provincial officials when he wanted to leave for Hong Kong. They, in turn, told customs authorities, and Mosher had no problems at the border. But on a later attempt to leave, Mosher found that customs officers were not expecting him—so he turned back rather than be searched. He then approached the American Consulate in Canton and the question of using the diplomatic pouch for Mosher's material was raised. Mosher was ultimately told that the U.S. Government would not get involved.

A year after Mosher left Guangdong Province, an article on Chinese birth-control practices appeared in the May 10, 1981, edition of The Sunday Times Chinese Weekly in Taiwan. Mosher told officials at Stanford that he had presented a lecture to a scholarly group in Taiwan and a local reporter had written the story, for which he supplied pictures.

But the byline on the article was Steven Westley, and Mosher's middle name is Westley. The article provides evidence of abortions performed in China under duress well into the third trimester of pregnancy. The disclosure obviously displeased Chinese officials, but it also attracted some disapproval from American academics, who say Mosher should have masked the identity of his research subjects before turning over the photos.

China has now clamped down on rural fieldwork by foreigners, limiting it to a scant three weeks. It has also issued a set of fourteen regulations for researchers, one of which requires them to list materials to be taken out of the country. One Chinese official recently declared that "no single individual is responsible for the tighter policy." But Jack Potter, a Berkeley anthropologist who did fieldwork in China at the same time as Mosher, disagrees. Potter, who clearly disapproved of Mosher's style after meeting him, is one of several American academics who have said that the Chinese blamed Mosher for the crackdown.

Scapegoat? Some American scholars believe that Mosher is a scapegoat—that the Chinese have had second thoughts about social scientists prowling around their backyard and would be trying to restrict access anyway. Yet even that theory is tempered by ambivalence about Mosher's behavior. "The Chinese on the whole are not happy with field research," says one West Coast Sinologist. "But if they were looking for a scapegoat, Mosher played right

into their hands." Michel Oksenberg, chairman of the Joint Committee on Contemporary China of the Social Science Research Council and the American Council of Learned Societies, allows that there is "a question as to whether Mosher behaved responsibly, or whether he was testing the Chinese system to the limits with an apparent lack of concern for subsequent research." The Joint Committee has begun looking into the allegations against Mosher—and so has Stanford, which this month appointed a faculty committee to determine whether he acted unprofessionally. Meanwhile, NEWSWEEK has learned that two of the three professors who were his dissertation advisers have withdrawn. The committee's judgment could clear Mosher or taint him permanently. Whatever his fate, American scholars seem to have lost ground in their efforts to understand China and its people.

DENNIS A. WILLIAMS with MELINDA LIU in Peking and GERALD C. LUBENOW in San Francisco

Mosher: Indiscreet?
Dirk Bennett





An American Disease

MEG GREENFIELD

This country has developed a ritual for failing in our confrontations with Third World turmoil, and it has been a great success: it worked so well in Iran and Indochina that we seem determined to try it out in Central America and the Caribbean. True, there are some regional variations, but the basic formula remains the same. It involves, first, a couple of competing analyses of the turmoil that are at odds over what the cause of the trouble is, but as one in their unrealistic, oversimplified approach. Then it involves, invariably, a fight to the death to defend each analysis—never mind what happens to the region in turmoil—so that eventually the policy choices people are arguing about have practically nothing to do with the problem they are confronting.

In Central America now, as in Indochina and Iran in an earlier day, the political conflict is viewed by many in the American Government as almost solely the malevolent work of a Soviet-connected conspiracy. This view has an unfortunate impact on the conduct of American policy beyond the obvious one of directing our energies at a single aspect of the trouble and our support to characters whose anti-communism may be their only redeeming feature.

It also, and this is the fatal part so far as making useful decisions is concerned, automatically activates a political response that denies all. By "all" I mean all possibility that anything more sinister than a largely justified, democratically inclined local protest movement is at work. This school insists on seeing everyone from the Sandinistas in Nicaragua to the mullahs and Mujahedin of Iran to the Khmer Rouge and Viet Cong of another day as your basic Eleanor Roosevelt in national dress, nice but exasperated liberals driven to do, perhaps, some desperate and violent things, *but wouldn't you be, too?*

Choices: There you have the enduring outlines of the sterile American policy debate. What makes it so attractive, one must assume, to the people who work either side is that it doesn't generally require making any especially difficult—I mean *really* difficult—choices. We should support and arm the government in its struggle with the forces of international communism, it will be said. Or, we should get out and stay out and let nature take its course, let the forces of reform, which we should actually be sup-

porting, at least prevail and stop thinking there are Russians and Cubans everywhere.

Recognizing a variation on this argument in our current political controversy over Administration policy toward El Salvador in particular and Central America and the Caribbean in general, you have to ask yourself whether, after all that tendentious talk about "lessons," the right or the left learned anything at all from our recent misadventures. Our Indochinese and Iranian allies were armed to the teeth by us. Surely, even allowing for eventual American second thoughts and doubts about supporting them forever, it should be apparent that there was a domestic political dimension to their troubles that American policy

Unfortunately, our strategy for failure in the Third World has been a great success so far.

couldn't deal with. How anyone could fail to believe this also to be the case with the government of El Salvador now or the government of Nicaragua under the fallen Somozas I will never know.

Still, the wishful thinking and fantasies of the military-minded, anti-communist right strike me as being probably less harmful to the possibility of doing things well in these turbulent places than do the comparable fantasies of the romantic, reform-minded left. That may be merely because I keep expecting more insight and discrimination from this quarter—and God knows the crashed assumptions of the past ten years should have produced more of both.

Surely if postwar Indochina and post-Pahlavi Iran tell us anything, it is that the so-called popular alternatives to our less attractive friends among governments of the right are not necessarily any improvement. From which it should be possible to conclude that in countries all over the world where we believe we have an interest or a claim we are obliged to pursue there may be no attractive or even minimally acceptable

political ally. Maybe that means we still have overwhelming national reason to support an unacceptable ally. Maybe it means we walk away from it. Maybe it means we make some other more complicated or partial choice. All I'm saying is that we rarely even reach these hardest of questions, because there is so compelling a force in our political chemistry at home to keep us from acknowledging that the choices are as bad or imperfect as they are.

Evidence: With due respect to the French, for example, and in praise of that particular aspect of their policies most of us like least, they do not seem to have any trouble whatever in seeing the world around them in the harshest, most realistic light and in acting in what they take to be their own interest in the most unsentimental (to be dainty about it) way. But in this country we insist on interpreting evidence that contradicts our assumptions about "our" side in a conflict abroad as only further evidence of the rightness of those assumptions. Thus, the collapse of a beloved ally's armed forces and the defeat of his military struggle to save a doomed political base will be viewed by the friends of right-wing governments in this country as proof we didn't send them enough F-16s after all. The collapse will be seen as the indirect handiwork of those who were questioning and impeding the arms flow.

And what will happen then? When the peerless general, prince or civilian strongman gets chased out of his palace, or maybe strung up in it, and the forces of "light" take over and turn out to be vicious, repressive butchers themselves, what is to be said by their erstwhile champions? Not that they turned out to be a rotten lot, but rather that our earlier support of their oppressors made them that way.

We are not there yet in Central America. We are still at the point where one side is saying that the rightist soldiers need more support, and the other is saying that those Cuban-shipped, Russian-made arms don't exist. Even at today's accelerated rates of disaster, that gives us some time before the former are asking who "lost" Central America and the latter are loftily replying that it is arrogant for us to have thought it was ours to "lose."

How nice it would be if we could break the pattern before that happens this time.

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5 mg. "tar", 0.4 mg. nicotine av. per cigarette, FTC Report May 1981.

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