A LEGEND'S LEGACY

Babe Ruth's cancer helped doctors shape modes of treatment

By Lawrence K. Altman
New York Times News Service The Dallas Morning News

At Babe Ruth Day at Yankee Stadium in 1947, the baseball hero of the generation stood before an admiring crowd, deep in pain and emaciated from advancing cancer, not yet aware of what ailed him. In the dugout moments before, clad in a topcoat and golf hat, he suffered a coughing spell, then, pulling himself together, walked to home plate, mentally recalling the day Lou Gehrig had made the same trip.

Associated Press file photo

Baseball legend George Herman "Babe" Ruth is shown in a 1923 photo.

In a broadcast heard around the world, Ruth spoke slowly and extemporaneously in a raspy voice.

"You know how bad my voice sounds," Ruth told the roaring crowd. "Well, it feels just as bad."

Sixteen months later, at 53, he was dead.

This year, the 50th anniversary of Ruth's death, his sports legacy has been extolled again as baseball heroes of newer generations breezed past the home-run record the Babe held for 34 years, until 1961.

But unknown to many, Ruth also left a legacy in the annals of medical history.

In fact, he was among the first patients anywhere to receive experimental chemotherapy, and some researchers say he was the first ever to receive a combination treatment of chemotherapy and radiation for his type of cancer. For Ruth, the chemotherapy worked dramatically — but only temporarily. Nevertheless, knowledge gained from his case helped shape the combination therapy that is now standard for his disease.

Shortly after his death, the nature of his disease became clear and well publicized. Ruth suffered from a rare cancer, naso-pharyngeal, that arose in the air passages in the back of his nose and mouth.

But the images of a hoarse Ruth, perpetuated in audio and videotapes on the Internet, in movies and in sports broadcasts, in addition to his well-known smoking and drinking proclivities, have contributed to the myth that Ruth had throat cancer, which is generally taken to mean cancer of the larynx, or voice box.

The distinction in cancer type may be academic to fans, but to patients and the doctors who treat them, the difference is crucial.

Recently, even a peer-reviewed medical journal erred in stating the cause of Ruth's death.

Earlier this year, *Cancer Therapeutics*, the official journal of the Coalition of National Cancer Cooperative Groups, published an article

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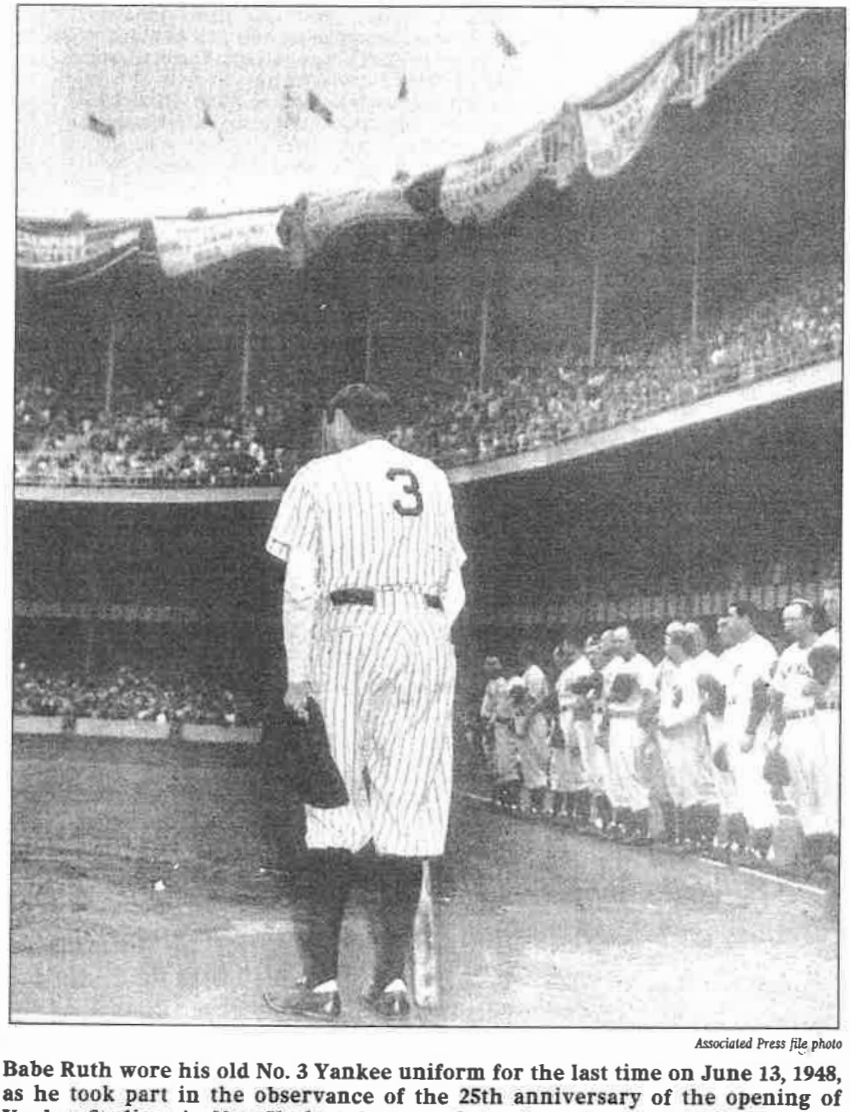

Associated Press file photo

Babe Ruth wore his old No. 3 Yankee uniform for the last time on June 13, 1948, as he took part in the observance of the opening of Yankee Stadium in New York. A few days later, he entered a hospital.

A man with a

Ex-spy for Israel s of finding, kidnap

By Sean Brickell
The Guardian

WOODBURY, England — don't find Hermann Arndt's h by accident. His home in the D village of Woodbury is a privat silent place. But that's how thi mer international spy likes it t quiet, discreet and hidden from ing eyes.

For the few people who do c into contact with the bespecta 77-year-old Mr. Arndt, he portr picture of an elderly man livin rural tranquillity. He is small, and fit, albeit slightly stooped, messy, dark gray hair. Behind now well-established veneer l dangerous and secret past.

The only clues to this are cautious smile and piercing They show no emotion, yet make one feel as if he has seen r through you. But this is only r ral for a man who was once agent for Israel's secret foreign telligence service, Mossad. He also the chief interrogator for el's internal intelligence serv Shin Bet.

Mr. Arndt's claim to fame that's an appropriate phrase f man who eschews attention, is he was the man responsible pulling off one of the great coup post-war espionage. Working un the alias "Zvi Aharoni," the man-born Jew tracked down kidnapped Nazi war criminal A Eichmann from his hideaway in gentina.

During World War II, Eichma an SS lieutenant colonel, was sponsible for the Gestapo's tr portation of Jews to the gas ch bers of the concentration camp

For Mr. Arndt, it was a ri undercover assignment.

"First, I was an Israeli diplom he recalled. "I had a diploma passport because it's not a crim look for somebody or to photogr

Ruth's case offers glimpse of an older style of medicine

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by Dr. Dennis Cooper, a Yale oncologist, stating that Ruth had cancer of the larynx, and that even 50 years later, his chances for being cured were only slightly improved.

The article prompted an intense discussion among doctors at the University of California at San Francisco, who then turned to original source materials, microfilm of *The New York Times* and Ruth's autopsy report. Next month, those doctors are publishing another article, helping to correct the record, in the journal *Laryngoscope*. Until then, its editors are keeping the new paper under wraps, even though it is largely based on 50-year-old newspaper accounts.

Ruth's battle against cancer offers a rare glimpse into the many dramatic changes in medicine and attitudes toward research that have occurred in just half a century. The changes include greater accuracy in diagnosis, more effective therapy and stronger rules to inform patients about diagnoses and the consent now required from patients participating in experiments.

Yet the sobering fact is that more than half a million people will die from cancer in 1998 in this country.

Ruth's health began failing in September 1946 when he sought to return to baseball as a manager. His voice became progressively hoarser. He was gripped with severe and relentless pain in his left eye. His head ached. In November, he entered French Hospital in New York City, where doctors diagnosed sinusitis, then looked at possible dental problems and pulled three teeth, without improvement. His face swelled, his left

Associated Press file photo

Babe Ruth hits a home run into the upper deck of Yankee Stadium. He was on the way to a 60-homer year in 1927. His home-run record stood until 1961.

eye became shut and he lost the ability to swallow. Ruth said he "seldom could speak." When he did, he wrote in his autobiography, *The Babe Ruth Story*, his "voice sounded like somebody gargling ashes."

X-rays showed a large abnormality at the base of Ruth's skull. But several biopsies of tissues in his mouth showed nothing abnormal. Ruth's symptoms worsened. His neck enlarged from swollen lymph nodes. His jaw hurt when he ate, and he was unable to swallow. Later, Ruth was fed intravenously. Although doctors were unable to diagnose Ruth's problem, they treated him with radiation. His hair fell out in chunks.

In December, the doctors operated on Ruth and documented extensive spread of the cancer in the neck. But in the operation, surgeons had to tie off the external carotid artery because the cancer had wrapped itself around the blood vessel in his neck. The cancer also pressed on nerves that course through the neck from the brain. The pressure partly paralyzed muscles controlling his voice, accounting for his hoarseness, and making swallowing even more difficult.

In February 1947, Ruth spent his 52nd birthday in the hospital. He had played before throngs of cheering fans in his 22-year professional career, which ended in 1935. Now, Ruth was secluded and allowed few visitors. "I often felt so alone that the tears would run helplessly down my cheeks," Ruth wrote.

In April 1947, every ballpark in organized baseball celebrated Babe Ruth Day when Ruth, bolstered by his radiation treatments, uttered his famous hoarse words. By June, those benefits from radiation had waned. Severe pain had returned; he could not sleep.

Modern treatment

Ruth then joined the often-unaware group of anonymous patients who ushered in the modern era of cancer treatment, which grew out of American research into chemical warfare agents during World War II. In 1942, researchers at Yale University tested one such agent, nitrogen mustard, in a human for the first time. But government secrecy restrictions prevented publication until 1946, after several hundred patients had been treated.

At the time, a team headed by Dr. Richard Lewisohn, a surgeon at Mount Sinai Hospital in New York City, was experimenting with an anti-cancer drug, teropterin, in mice. There were different teropterins, all extracted from brewers' yeast, and their effects on mice varied widely with the preparation.

Over the violent objections of Dr. Lewisohn's team members, who believed the substance was not ready for tests in people, Ruth began receiving daily injections of teropterin on June 29. (A closely related drug, methotrexate, is now widely used in treating cancer and other diseases.) Ruth said he knew teropterin had rarely been used on humans and "asked no questions," and probably signed no formal consent, as is required today, before receiving injections for six weeks.

Ruth knew the risk: The drug could help or hurt. "I realized that if anything was learned about that type of treatment, whether good or bad, it would be of use in the future to the medical profession and maybe to a lot of people with my same trouble," Ruth wrote.

The drug had dramatic effects. His pain waned; his spirit improved. Able to eat again, he began regaining some of the 80 pounds he had lost. By August, the

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Experimental drug brought some relief to baseball hero

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enlarged lymph nodes in his neck had completely disappeared. In September, Dr. Lewisohn reported Ruth's case, without using his name, at a scientific meeting in St. Louis. But word leaked that Ruth had received the novel therapy.

Citing success on an unidentified famous figure, *The Wall Street Journal's* lead story of Sept. 11, 1947, suggested that scientists were on the verge of a cure for cancer.

Meanwhile, Dr. Lewisohn's teammates left Mount Sinai because the hospital refused to support further research on teropterin, said Dr. John Laszlo, whose father, Dr. Daniel Laszlo, was a team member. The younger Dr. Laszlo is a retired official of the American Cancer Society.

The Babe Ruth trials exemplify just how much has changed in a half-century. Today, besides requiring more extensive animal testing, Federal officials demand that researchers obtain written patient consent and gain approval from formal committees before testing experimental therapies on volunteers.

Ruth aware?

Whether Ruth was even fully aware that he had cancer is open to question.

On June 13, 1948, Ruth participated in the 25th anniversary of Yankee Stadium, wearing his old No. 3 Yankee uniform and telling misty-eyed fans how glad he was to be with his old pals again. A few days later, Ruth entered Memorial Hospital (now Memorial Sloan-Kettering Cancer Center) in Manhattan. His wife, Claire, later wrote, in *The Babe and I*, that he looked at the sign and told his doctor: "Doc, this is Memorial. Memorial is a cancer hospital. Why are you bringing me here?"

Not all patients at Memorial have cancer, his physician, Philip MacDonald, replied. But the radium put in his neck was used only for cancer.

Claire Ruth wrote that she believed the Babe never knew he had cancer, though she quoted her husband in a conversation with a visitor: "They think they are kidding me. But they aren't. I know what I got."

On Aug. 16, Ruth died of pneumonia. An autopsy showed the cancer that began in the nose and mouth had spread widely through his body.

Ruth apparently never received teropterin again. Mount Sinai has no records on Ruth or the research, a spokesman said.

Memorial Hospital's news release emphasized that Ruth "received no special drug or chemical in the attempt to control his tumor." Teropterin was not included in Ruth's treatment at Memorial because it "had been previously investigated at Memorial Hospital and found to be of no value in the treatment of cancer," the news release said.

Creating a stir

Ruth's cancer became an issue in July of this year when a team of specialists at the University of California at San Francisco discussed a patient with naso-pharyngeal cancer. A pathologist, Dr. Harvey Klein, said that while in training he had learned of Ruth's diagnosis.

"That created a great stir because virtually everyone else in the room said Ruth died of laryngeal cancer," said Dr. Jeffrey Spiegel, a specialist in head and neck surgery at the center.

The doctors made a friendly wager. "The reason we were so quick to make the bet is that we had just read the article in *Cancer Therapeutics* saying he had laryngeal cancer, and we were going to bring him a reputable medical journal at the next meeting to show him, saying here it is in print," Dr. Spiegel said.

Dr. Cooper, the Yale author, said in an interview that he talked about Ruth's case in his frequent lectures on head and neck cancer, but did not know about the news reports stating the type of cancer and the autopsy findings.

In San Francisco, Dr. Mark Singer, the chief of head and neck surgery at Mount Zion Hospital and a participant at the June meeting, was puzzled because the eye pain and headache Ruth had experienced typified cancer in the back of the nose much more than cancer of the vocal cords.

A colleague, Dr. Nadim Bikhazi, was asked to ascertain the cause of Ruth's death and found it in microfilm of *New York Times* articles, which described the autopsy findings. Dr. Bikhazi then received permission from Ruth's daughter, Julia Ruth Stevens, to examine the autopsy report. The crucial finding, Dr. Bikhazi said in an interview in San Francisco, was that no cancer was found in the larynx.