



---

## The Medical Legacy Of George Herman Babe Ruth

**Corresponding Author:**

Dr. William J Maloney,  
Clinical Associate Professor, New York University, 345 East 24th Street, 10010 - United States of America

**Submitting Author:**

Dr. William J Maloney,  
Clinical Associate Professor, New York University, 345 East 24th Street, 10010 - United States of America

**Article ID:** WMC001487

**Article Type:** Original Articles

**Submitted on:** 20-Jan-2011, 10:51:24 PM GMT **Published on:** 22-Jan-2011, 11:01:30 PM GMT

**Article URL:** [http://www.webmedcentral.com/article\\_view/1487](http://www.webmedcentral.com/article_view/1487)

**Subject Categories:** CANCER

**Keywords:** Nasopharyngeal carcinoma, Babe Ruth, Cancer, Cancer research

**How to cite the article:** Maloney W J. The Medical Legacy Of George Herman Babe Ruth . WebmedCentral  
CANCER 2011;2(1):WMC001487

**Source(s) of Funding:**

none

**Competing Interests:**

none

# The Medical Legacy Of George Herman Babe Ruth

**Author(s):** Maloney W J

## Introduction

Babe Ruth was one of the most beloved and recognized figures of American life in the twentieth century. Ruth rose like a phoenix from the most humble of origins to eventually take his rightful place among the most revered and cherished individuals the world has yet encountered. Ruth's initial rise to fame was a direct result of his superhuman prowess on the baseball diamond but, his iconic status could not have been achieved without his humanitarian efforts to inspire and raise the quality of life for his fellow man.

Endless examples of Ruth's charitable works abound but no where is his concern for humanity more evident than in the final two years of his life (1946-1948). Ruth was fighting a valiant battle against nasopharyngeal carcinoma. The cancer was exacting a horrible toll on Ruth but, he bravely accepted experimental cancer therapy in order to help medical research gain valuable information to treat individuals with this relatively rare form of cancer in the future.

The medical community, in particular, and the population, in general, today directly benefit from the medical information garnered from the medical research performed on this very willing superstar. Ruth remains an inspiration today and a reminder of the tremendous contribution human research subjects make to our wealth of medical knowledge.

### George Herman "Babe" Ruth

Ruth was born on February 6, 1895 (1) to a couple of German ancestry in Baltimore, Maryland. Ruth's parents were hard-working tavern owners who had little time to control their energetic and adventurous son. Ruth's father, on June 13, 1902, brought young George to St. Mary's Industrial School for Boys. St. Mary's was located only a few miles south of the Ruth family home but provided a life for George which greatly contrasted with the life he had previously known on the rough waterfront streets of Baltimore. St. Mary's was run by the Xaverian Brothers who provided discipline, order, and love for the children in their care. George was particularly fortunate to have been placed under the mentorship of Br. Matthias. Br. Matthias was a physically large man with an equally large heart. He introduced George to the game of baseball. George thrived at St. Mary's and his almost supernatural talent at baseball soon became evident to everyone. His first home run was hit at the amazingly young age of 7

over the right fielder's head (2).

George was recruited to play professional baseball and soon became known as "Babe" to the world. He started his major league career with the Boston Red Sox and was later traded in the most infamous of all sports trades to the rival New York Yankees. It was with the Yankees that Ruth became a most beloved international celebrity. All the while Ruth always remembered the lessons of humanitarianism and charity that he had learned so well during his days at St. Mary's.

On June 7, 1921 his most precious daughter, Dorothy, was born. Dorothy was Babe's only biological child and was a most faithful daughter to Babe throughout his life. Dorothy wrote of her times with her father in her book, "My Dad, the Babe: Growing up with an American Hero" (3). She would aid her father on his multitude of visits to children in hospitals throughout the world and would continue to spread Babe's message of charity long after his death until her own passing on May 18, 1989.

Many of Ruth's individual major league baseball records still stand seventy five years after his retirement from the sport. Among these records are most total bases and highest slugging percentage.

### Nasopharyngeal Carcinoma

Nasopharyngeal carcinoma (NPC) is a relatively rare cancer in the United States. However, it is a leading form of cancer in middle-aged natives of southern China, southeast Asia, the Arctic, North Africa, and the Middle East (4). The risk factors for NPC include viruses, genetic factors, the consumption of salted fish (5), and environmental factors (6).

NPC occurs more frequently in men than in women and is most frequently diagnosed in the sixth decade of life.

### The Initial Treatments and Misdiagnoses of Ruth

Ruth suffered through many misdiagnoses at various hospitals in New York City at the onset of his symptoms. In September of 1946 Ruth presented to the French Hospital with the left side of his face swollen and his left eye completely shut. He was diagnosed with either a toothache or sinusitis and his treatment consisted of penicillin and the extraction of three teeth.

In November of 1946 his physicians, again at the French Hospital, diagnosed his condition as Horner Syndrome when a radiograph revealed a large mass at the base of his skull (7).

Ruth was later misdiagnosed once again as having

laryngeal carcinoma based on his supposed history of heavy alcohol and tobacco consumption. Ruth underwent Radiation Therapy in November of 1946 and then, in December of 1946, he underwent unsuccessful surgical resection of the tumor. This surgery left him unable to swallow thus requiring a feeding tube (7).

Dr. Richard Lewisohn

Richard Lewisohn was born on July 12, 1875 and received his medical education at the University of Freiburg (8). Dr. Lewisohn made many contributions to medicine during his long career, primarily at New York's Mt. Sinai Hospital. His most well-known contribution is the introduction of the modern technique of blood transfusion (8). In 1947, Dr. Lewisohn was experimenting with an anti-cancer drug, teropterin (9) (pteroltriglutamic acid). However, to this point all his research was performed on mice. He was working with various teropterins, all of which were extracted from brewer's yeast. The particular preparation of the teropterin caused a wide variation in the effects seen on the mice (9). Dr. Lewisohn offered Ruth to receive this experimental therapy. Dr. Lewisohn was very honest with Ruth about his chances for a recovery although no formal informed consent was signed. Dr. Lewisohn told Ruth that receiving this drug probably would not help him and, in fact, might even make his condition worse. Ruth responded bravely that he would still like to go through with the experimental treatment in order to provide the medical community with information that might help individuals in the future with the same ailment. Thus, Ruth became a subject in one of the first clinical trials of an anti-cancer drug (10). Dr. Lewisohn's experimental course of teropterin injections led to a dramatic, albeit short-lived, improvement in Ruth (11). The improvement in Ruth's condition was featured in the lead story of September 11, 1947 in the Wall Street Journal which reported on Dr. Lewisohn's report of the case at a medical conference. The Wall Street Journal stated that researchers might be on the verge of a cure for cancer (12). Ruth was able to say farewell to his fans at Yankee Stadium and attend other public functions as a direct result of Dr. Lewisohn's treatment. Babe passed away on August 16, 1948. Dr. Lewisohn passed away 13 years later on August 11, 1961 at the age of 86.

## Conclusion

Babe Ruth's willingness to participate in the earliest of cancer drug trials provided much valuable information to the pioneers in cancer chemotherapy research.

During Babe's life he was dedicated to helping and providing comfort to the most vulnerable and forgotten individuals of society. He always had time for children- in particular, very ill children. Throughout his life Ruth would make countless visits to hospitals and orphanages around the world. On his visits to the hospitals, usually accompanied by his daughter Dorothy, Babe would make sure that the first to be brought to see him would be the most ill because he knew that they would not live long enough to experience the joy of meeting him at the ballpark.

Babe fought a valiant two year battle against his own cancer. During this period he suffered tremendously and knew that his own death was near. Yet, the teachings which were instilled in him at St. Mary's remained with him and Ruth selflessly continued his humanitarian mission. Cancer patients today directly benefit from the information researchers gathered from his case. Babe's wish came true- he is helping individuals with cancer today.

Babe's humanitarian mission did not end at 8:01pm on August 16, 1948 when Ruth passed away. Rather, his only biological daughter, Dorothy Ruth Pirone, carried on his humanitarian work until her own passing when she passed the torch to her daughter, Linda Ruth Tosetti, who continues to inspire individuals today with the Ruthian humanitarian message.

## References

1. Wagenheim K. Babe Ruth: His life and legend. New York: Praeger, 1974. reprint, Chicago: Olmstead Press, 2001.
2. Personal e-mail correspondence between Linda Ruth Tosetti and William James Maloney; January 12, 2011.
3. Pirone D, Martens C (1988). My Dad, the Babe: growing up with an American hero.
4. Chang ET, Adami HO. The enigmatic epidemiology of nasopharyngeal carcinoma. *Cancer Epidemiol Biomarkers Prev* 2006;15(10):1765-1777.
5. Hareyama M, Sakata K, Shirato H, et al. A prospective, randomized trial comparing neoadjuvant chemotherapy with radiotherapy alone in patients with advanced nasopharyngeal carcinoma. *Cancer* 2002;94(8):2217-2223.
6. Chen CJ, Liang KY, Chang YS, et al. Multiple risk factors of nasopharyngeal carcinoma: Epstein-Barr virus, malarial infection, cigarette smoking and familial tendency. *Anticancer Res* 1990;10(2B):547-553.
7. Bikhazi NB, Kramer AM, Spiegel JH, Singer MI. "Babe" Ruth's illness and its impact on medical history. *Laryngoscope* 1999;109(1):1-3.

8. Richard Lewisohn. 2011; available at: [www.pbs.org/wnet/redgold/innovators/bio\\_transflewiso hn.html](http://www.pbs.org/wnet/redgold/innovators/bio_transflewiso hn.html).
9. Altman LK. Babe Ruth big hitter in medical annals. Daily News (Los Angeles, CA); Dec 29, 1998.
10. Steensma DP, Shampo MA, Kyle RA. George Herman "Babe" Ruth Jr: baseball star and early participant in a cancer clinical trial. Mayo Clinic Proceedings;83(11):1262.
11. Maloney W, Weinberg M. A Comprehensive analysis of Babe Ruth's head and neck cancer. J Am Dent Assoc;139(7):926-932.
12. Altman LK. The doctor's world: Ruth's other record- cancer pioneer. NY Times, Dec 29,1998: F1,F4. 2011; Available at: <http://query.nytimes.com/gst/fullpage.html?res=9807E7DC143FF93AA15751C1A96E958260&sec=&spon=&pagewanted=2>.

## Disclaimer

This article has been downloaded from WebmedCentral. With our unique author driven post publication peer review, contents posted on this web portal do not undergo any prepublication peer or editorial review. It is completely the responsibility of the authors to ensure not only scientific and ethical standards of the manuscript but also its grammatical accuracy. Authors must ensure that they obtain all the necessary permissions before submitting any information that requires obtaining a consent or approval from a third party. Authors should also ensure not to submit any information which they do not have the copyright of or of which they have transferred the copyrights to a third party.

Contents on WebmedCentral are purely for biomedical researchers and scientists. They are not meant to cater to the needs of an individual patient. The web portal or any content(s) therein is neither designed to support, nor replace, the relationship that exists between a patient/site visitor and his/her physician. Your use of the WebmedCentral site and its contents is entirely at your own risk. We do not take any responsibility for any harm that you may suffer or inflict on a third person by following the contents of this website.

## Reviews

### Review 1

#### Review Title: [The Medical Story of a Hero](#)

Posted by Dr. Nariman Sepehrvand on 26 Jan 2011 12:55:10 PM GMT

1	Is the subject of the article within the scope of the subject category?	No
2	Are the interpretations / conclusions sound and justified by the data?	No
3	Is this a new and original contribution?	Yes
4	Does this paper exemplify an awareness of other research on the topic?	Yes
5	Are structure and length satisfactory?	Yes
6	Can you suggest brief additions or amendments or an introductory statement that will increase the value of this paper for an international audience?	Yes
7	Can you suggest any reductions in the paper, or deletions of parts?	No
8	Is the quality of the diction satisfactory?	Yes
9	Are the illustrations and tables necessary and acceptable?	Yes
10	Are the references adequate and are they all necessary?	Yes
11	Are the keywords and abstract or summary informative?	No

**Rating:** 3

**Comment:**

Indeed the manuscript is a Case study not a review. It could be a review if was reviewed other patients with the same rare disease too.

The manuscript was better to focused more in the field of medicine. The story of Babe Ruth could be a reason or excuse for the authors to explain more about the Nasopharyngeal Carcinoma (NPC), its usual clinical presentations, therapies, prognosis, and outcome. To be honest the authors tried to narrate a story about the American hero, not to add the scientific knowledge of the readers.

One way to consider this article closer to the field of medicine is to interpret the Babe Ruth's life as an ethical case: Similar to the case of the child that was the subject for experimentations of Edward Jenner (1749-1823) in developing the Smallpox vaccine.

The courage of participation in a drug trial should be motivated by telling such stories to the people. Then they will know that implementing clinical trials seeking for a better therapy for diseases such as cancer is so important and need some heroes even to sacrifice themselves in this way.

The English writing of the article was very good. It only lacks a summary.

I feel the conclusions are not proper for the main concept of the article, and indeed is a part of that. The hidden concept behind this manuscript is the importance of participation of subjects in medical researches on the future progression of medicine and human wellbeing, not only the conclusion of the Babe Ruth's life.

**Competing interests:** There was no conflicting interest.

**Invited by the author to make a review on this article? :** No

**Experience and credentials in the specific area of science:**

I have some research experiences in the field of cancer since 5 years ago...

**Publications in the same or a related area of science:** Yes

**How to cite:** Sepehrvand N. The Medical Story of a Hero [Review of the article 'The Medical Legacy Of George Herman Babe Ruth ' by ]. WebmedCentral 1970;2(1):REVIEW\_REF\_NUM418

## Review 2

### Review Title: [Medical Legacy of Babe Ruth](#)

Posted by Dr. Shree Ram Singh on 24 Jan 2011 04:41:14 AM GMT

1	Is the subject of the article within the scope of the subject category?	Yes
2	Are the interpretations / conclusions sound and justified by the data?	Yes
3	Is this a new and original contribution?	Yes
4	Does this paper exemplify an awareness of other research on the topic?	Yes
5	Are structure and length satisfactory?	Yes
6	Can you suggest brief additions or amendments or an introductory statement that will increase the value of this paper for an international audience?	No
7	Can you suggest any reductions in the paper, or deletions of parts?	No
8	Is the quality of the diction satisfactory?	Yes
9	Are the illustrations and tables necessary and acceptable?	Yes
10	Are the references adequate and are they all necessary?	Yes
11	Are the keywords and abstract or summary informative?	Yes

**Rating:** 8

**Comment:**

This is a historical and an inspiring article about the Babe Ruth, the greatest sports heroes in American culture and the greatest baseball player in history. Other than some transition, as well as the missing details about the misdiagnosis, dose and side effects during his treatments, the article is nicely written. The article is more a brief overview on subject (review article) and not an original research article. Cancer is the number one cause of death throughout the world and the cure is still far away. This article reminds us to work together to fight against this deadly disease and to find its ultimate cure. The most important is the early detection of cancer, which is still lacking. Hope modern imaging technology and cell therapy will provide the ultimate cure of this disease.

**Competing interests:** none

**Invited by the author to make a review on this article? :** No

**Experience and credentials in the specific area of science:**

Working in this field from more than 10 years.

**Publications in the same or a related area of science:** Yes

**How to cite:** Singh S. Medical Legacy of Babe Ruth [Review of the article 'The Medical Legacy Of George Herman Babe Ruth ' by ]. WebmedCentral 1970;2(1):REVIEW\_REF\_NUM408

## Review 3

### Review Title: THE MEDICAL LEGACY OF GEORGE HERMAN

Posted by Prof. Eman I El-Abd on 23 Jan 2011 07:58:54 PM GMT

1	Is the subject of the article within the scope of the subject category?	Partly
2	Are the interpretations / conclusions sound and justified by the data?	Partly
3	Is this a new and original contribution?	Yes
4	Does this paper exemplify an awareness of other research on the topic?	Yes
5	Are structure and length satisfactory?	No
6	Can you suggest brief additions or amendments or an introductory statement that will increase the value of this paper for an international audience?	No
7	Can you suggest any reductions in the paper, or deletions of parts?	No
8	Is the quality of the diction satisfactory?	Yes
9	Are the illustrations and tables necessary and acceptable?	No
10	Are the references adequate and are they all necessary?	Yes
11	Are the keywords and abstract or summary informative?	No

**Rating:** 2

**Comment:**

The paper is more historical with no summary or key words

I suggest to rewrite it as a case study illustrating the risk factor for this particular case such as for example his transference into industrial country and others that might have affected him, symptoms, investigations that were performed and the revolutions made now in diagnosis, what are the consequences of misdiagnosis

I also suggest to give more information about the drug, follow up, and outcome results compared to what we achieved today

You may add non-applicable to that form so for examples if there are no tables or illustrations I can have more appropriate selections

**Competing interests:** No

**Invited by the author to make a review on this article? :** No

**Experience and credentials in the specific area of science:**

See the below publication in the field of oncology

**Publications in the same or a related area of science:** Yes

**References:** 1. El-Abd E, El-Tahan R, Fahmy L, Zaki S, Faid W, Kandil K, El-Khwisly F. Serum metastasin mRNA is an important survival predictor in breast cancer. *Br J Biomed Sci* 2008; 65 (2): 90-94. 2. Abd EL-Moneim N, Ebid S, Kazem A, Saad A, Mousa S, EL-ABD E, Hewala T. The role of angiogenesis assessment in the prognosis of breast carcinoma and in the evaluation of the therapeutic effect of ?shark care? drug as an angiogenesis inhibitor. *Turkish journal of cancer* 2008; 38 (3): 123-134. 3. El-Abd E, Hassan A, El-Ashry O, El-Swedy S. p27 and mdm2 as molecular grading markers in TCC. *Turkish journal of cancer* 2008; 38 (2): 68-77. 4. Morsi MI, Hussein AE, Mostafa M, El-Abd E, El-Moneim NA. Evaluation of tumor necrosis factor-alpha, soluble P-selectin, gamma-glutamyl transferase, glutathione S-transferase-pi and alpha-fetoprotein in patients with hepatocellular carcinoma before and during chemotherapy. *Br J Biomed Sci* 2006;63 (2):74-8. 5. El-Abd EA, El-Kerm YM, Abdel Hammed AS, El-Sewedy TS, Assem NM, Kasem A, El-Sewedy SM. Prognostic significance of growth hormone/insulin like growth factor-1/insulin axis in colorectal carcinoma. *JMRI* 2006; 27 (3): 190-3. 10. Saad A, Kazem A, El-Abd E, El-Kerm Y, El-Badawi A. Incidence and prognostic value of positive peritoneal lavage in colorectal carcinoma. *J Egypt Soc Path* 2005; 25 (1): 9-16. 6. Saad A, Sheta M, Sobhi A, Aly E, El-Abd E. Clinical and pathological assessment of sentinel lymph node micrometastasis in breast cancer using RT-PCR.



J Egypt Soc Path 2005; 25 (1): 81-87. 7. El-Abd E, Morsi M, Zaki S, Sobhi A. Relationship between serum hormones and angiogenesis with clinicopathological behaviour in Egyptian breast cancer. Bull Alex Fac Med. 2003; 39 (3): 257-264.

**How to cite:** El-Abd E. THE MEDICAL LEGACY OF GEORGE HERMAN [Review of the article 'The Medical Legacy Of George Herman Babe Ruth ' by ].WebmedCentral 1970;2(1):REVIEW\_REF\_NUM405

## Review 4

### Review Title: **The truth!**

Posted by Mrs. Linda Ruth Tosetti on 23 Jan 2011 03:02:05 PM GMT

1	Is the subject of the article within the scope of the subject category?	Yes
2	Are the interpretations / conclusions sound and justified by the data?	Yes
3	Is this a new and original contribution?	Yes
4	Does this paper exemplify an awareness of other research on the topic?	Yes
5	Are structure and length satisfactory?	Yes
6	Can you suggest brief additions or amendments or an introductory statement that will increase the value of this paper for an international audience?	No
7	Can you suggest any reductions in the paper, or deletions of parts?	No
8	Is the quality of the diction satisfactory?	Yes
9	Are the illustrations and tables necessary and acceptable?	Yes
10	Are the references adequate and are they all necessary?	Yes
11	Are the keywords and abstract or summary informative?	Yes

**Rating:** 9

**Comment:**

I am very happy, as the granddaughter, to have the truth finally told about my grandfather's illness. Everyone thinks it was caused by his lifestyle and this is a falsehood. I thank Dr. Maloney for bring the truth to light. My grandfather so loved people that he offered himself up for experimental drugs to help the research of cancer. He gave everyday of his life and he kept giving to the end. This article is the best I have seen written about my grandfather, Babe Ruth. I have hope that the facts will now be set straight, Babe was a ball player, but first, he was a great humanitarian.

**Competing interests:** None

**Invited by the author to make a review on this article? :** No

**Experience and credentials in the specific area of science:**

I am the blood granddaughter of the subject of the article and have studied my grandfather for over 30 years.

**Publications in the same or a related area of science:** No

**How to cite:** Ruth Tosetti L.The truth![Review of the article 'The Medical Legacy Of George Herman Babe Ruth ' by ].WebmedCentral 1970;2(1):REVIEW\_REF\_NUM404

## Review 5

### Review Title: Babe Ruth, more than just baseball

Posted by Mr. Gary Weisinger on 23 Jan 2011 06:02:26 AM GMT

1	Is the subject of the article within the scope of the subject category?	Partly
2	Are the interpretations / conclusions sound and justified by the data?	Yes
3	Is this a new and original contribution?	Yes
4	Does this paper exemplify an awareness of other research on the topic?	Yes
5	Are structure and length satisfactory?	Yes
6	Can you suggest brief additions or amendments or an introductory statement that will increase the value of this paper for an international audience?	No
7	Can you suggest any reductions in the paper, or deletions of parts?	No
8	Is the quality of the diction satisfactory?	Yes
9	Are the illustrations and tables necessary and acceptable?	Yes
10	Are the references adequate and are they all necessary?	Yes
11	Are the keywords and abstract or summary informative?	Yes

**Rating:** 5

**Comment:**

I would like have seen mention of the first human clinical trial of Laletrile which well preceeded the drug used on Babe Ruth. I would also have liked to see some mention of how the drug used in the current manuscript was to interfere with the cancer in question. Additionally any side effects on Ruth would have added to this manuscript. But outside of this it was an enjoyable read which I took something from.

**Competing interests:** No

**Invited by the author to make a review on this article? :** No

**Experience and credentials in the specific area of science:**

I have been in the field of cancer research for 32 years.

**Publications in the same or a related area of science:** No

**How to cite:** Weisinger G.Babe Ruth, more than just baseball[Review of the article 'The Medical Legacy Of George Herman Babe Ruth ' by ].WebmedCentral 1970;2(1):REVIEW\_REF\_NUM402

## Disclaimer

This article has been downloaded from WebmedCentral. With our unique author driven post publication peer review, contents posted on this web portal do not undergo any prepublication peer or editorial review. It is completely the responsibility of the authors to ensure not only scientific and ethical standards of the manuscript but also its grammatical accuracy. Authors must ensure that they obtain all the necessary permissions before submitting any information that requires obtaining a consent or approval from a third party. Authors should also ensure not to submit any information which they do not have the copyright of or of which they have transferred the copyrights to a third party.

Contents on WebmedCentral are purely for biomedical researchers and scientists. They are not meant to cater to the needs of an individual patient. The web portal or any content(s) therein is neither designed to support, nor replace, the relationship that exists between a patient/site visitor and his/her physician. Your use of the WebmedCentral site and its contents is entirely at your own risk. We do not take any responsibility for any harm that you may suffer or inflict on a third person by following the contents of this website.