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Pathology in Pinstripes: The Diseases of New York Yankees Legends

By Michael E. Goltzman

It is nearly impossible to imagine the existence of the Hall of Fame, or baseball itself, without the establishment of the New York Yankees. Hailing from Bronx, NY, the Yankees are the most celebrated franchise in the sport. With 27 World Championships, 40 Pennants, and 52 playoff appearances,¹ the “Bronx Bombers” have defined themselves as the epitome of greatness in a game built upon historic landmarks and tradition. These dynasties were led by the legends of the game, most notably Babe Ruth, Lou Gehrig, and Mickey Mantle.

Much like baseball, medicine is a discipline that is measured in statistics. Instead of stolen bases, batting average, and home runs, there is more concern for mortality and disease incidence. At times, the storylines between baseball and medicine find themselves on the same page, capturing the moments when baseball giants have been met with unthinkable disease. Seemingly untouchable on the base paths, these men were just as vulnerable to heartbreaking diagnoses as the fans cheering them on.

THE IRON HORSE

On June 1, 1925, Henry Louis Gehrig entered the game as a pinch hitter and, without respite, he would go on to lead the Yankees to six World Series Championships, before his retirement in 1939.¹

Often criticized for the length of its season, Major League Baseball has a regular season length of 162 games. Few players last an entire season without taking a day off for rest or injury, with pitchers taking off four games between each start. However, it was Gehrig who continuously pushed the boundaries of resilience, establishing himself as a model for dependability. He played in a remarkable 2,130 consecutive games, a streak that was considered unbreakable (until Cal Ripken Jr. stunned the baseball world by breaking the record in 1995). Over the course of Gehrig’s streak, he sustained a broken thumb, a broken toe, and back spasms. Doctors were able to identify 17 healed fractures on a hand X-ray taken during his career.³ Appropriately nicknamed “The Iron Horse,” Gehrig was steadfast in providing all of his might through his leadership and his bat.

In 1938, Gehrig’s batting average (BA) fell below .300 for the first time since 1925. The ever-sturdy first baseman was becoming weak and it was more than his statistics that signaled an impending collapse. Before the 1938 season, Gehrig starred in the film “Rawhide,” when he first started to show signs of atrophy and leg weakness.⁴ After one last disappointing game in June of 1939, Gehrig visited the Mayo Clinic, and no amount of baseball experience could have prepared him to receive some devastating news.

Amyotrophic lateral sclerosis (ALS) is an idiopathic, fatal, neurodegenerative disease of the motor system causing gradual paralysis, respiratory failure, and death within three years of symptom onset in most patients.⁵ Gehrig exhibited most of the common symptoms of the disease, including muscle weakness, fasciculation, and wasting. The diagnosis remains a clinical one, lacking any reliable diagnostic tests. Toxic, gain-of-function mutations in the superoxide dismutase gene on chromosome *21q* have been associated with familial ALS.⁵ Free radical formation has been suggested as having a role in the development of ALS. Gehrig was originally treated with potent levels of Vitamin E, and, although unsuccessful, research scientists are revisiting the therapeutic potential of this antioxidant.

On July 4, 1939, Gehrig retired from baseball at Lou Gehrig Appreciation Day. Gehrig's voice stirred through the speakers of Yankees Stadium, echoing famously to the somber onlookers:⁶

Fans, for the past two weeks you have been reading about the bad break I got. Yet today I consider myself the luckiest man on the face of the earth...I may have been given a tough break, but I've got an awful lot to live for.

Lou Gehrig died in 1941, just before turning 38 years old. In North America, ALS is synonymous with "Lou Gehrig's Disease," but his legend is not defined by the disease that took him so young. The legacy of Lou Gehrig cherishes the man with a number 4 stitched to his back, breaking the limits of possibility from the left side of the plate.

THE BABE

To this day, "The Babe" is the most recognizable figure in baseball, even to those who don't know the sport. Babe Ruth was wildly outspoken and indulged in the likes of anything he could, most often food, alcohol, and women. If it wasn't the incredible baseball feats that made him famous, it was his thirst for the public's attention

From 1920 to 1934, Babe Ruth led the Yankees to seven American League (AL) pennants and four World Series titles. Ruth's lifetime statistics also include 2,873 hits, 506 doubles, 2,174 runs, 2,213 RBI, and a career .342 BA.¹ In April 1923, the Yankees were playing in their brand-new stadium and it immediately was dubbed "the house that Ruth built."⁷ However, it was during the 1927 season that Ruth transcended from man to myth, hitting a homerun in every AL ballpark.

In the midst of his record-breaking and awe-inspiring career, Ruth accumulated as many vices as he had trophies. Ruth would continuously use chewing tobacco, spitting his way through every dugout he visited. Similarly, he would smoke cigars with his whiskey and beer, fueling his gaudy escapades. Ruth's reckless lifestyle would break down his invincibility.

In 1946, Ruth developed stabbing retro-orbital pain. When the pain became excruciating and the entire left side of his face had swelled, Ruth sought medical advice. After the initial misdiagnosis of sinusitis, and the removal of three teeth, the medical team at French Hospital

discovered signs of left-sided Horner Syndrome, with weakness of the left shoulder and vocal cords.⁷ A plain X-ray revealed a mass at the skull base that was the source of his discomfort, assumed to be laryngeal carcinoma. Ruth would proceed to receive treatment for his cancer, including surgical resection of the mass, radiotherapy for symptomatic relief, a chemotherapeutic trial of teropterin (a precursor to methotrexate), and radiated gold seed implantation into his neck. This battery of treatments never had the chance to make full contact, as the tumor was discovered to be nasopharyngeal carcinoma (NPC) at autopsy. However, like the trailblazer he was, Ruth was most likely the first cancer patient to receive sequential radiotherapy and chemotherapy for NPC.⁷ If Ruth had presented today with advanced-stage NPC, he would have had a favorable chance of long-term survival with the proper therapy.⁸

Like the rare talent that he was, the tumor that surrounded the carotid sheath of Babe Ruth's neck is a rare variant of squamous cell carcinoma, called lymphoepithelioma. NPC also commonly invades the skull base,⁹ leading to cranial nerve deficits and excessive pain that had afflicted the once untouchable Ruth.

On June 13, 1948, Babe Ruth achingly dressed himself in his pinstriped attire for the last time, in order to celebrate the retirement of his jersey. Two months later, the patron saint of baseball, George Herman Ruth, died in his sleep due to the cancer that had spread throughout his entire body. The Babe was bigger than baseball, for he was an American icon who deserved a few more years to enjoy the game that he loved so dear.

THE MICK

The New York Yankees had a taste of greatness with World Championship teams led by Gehrig and Ruth, but by the 1950s, the franchise needed a new face. Mickey Mantle was merely a boy when he began his tenure in the Bronx. Instead of celebrating his high school graduation, Mickey was excused from the commencement to play baseball for a renowned scout from the Yankees. At age 16, he was signed immediately.¹⁰

For 17 seasons, Mantle would stun the baseball world with his ability to fly around the bases and flash across the outfield with incomparable speed. In 1956, Mantle would be awarded the Triple Crown and was voted as an All-Star in 16 seasons. Astoundingly, Mantle would appear in 12 World Series, winning seven titles. Moreover, he was the AL most valuable player (MVP)—three times (1956, 1957, 1962).¹ Impressive as his resume was, “The Mick” let his body take the punishment for the years of baseball success. Underneath his cap and in the dark corners of the locker room, Mickey was wincing in pain and falling apart. Tormented by his demons, Mantle turned to alcohol to dull the pain of treating his body carelessly.

Chronic alcohol use can result in the accumulation of collagen, other matrix proteins, and fat in the liver. Close to half of patients with fatty infiltration of the liver will progress to fibrosis, of which 20% will develop cirrhosis.¹¹ As in other liver diseases, patients with cirrhosis are at an increased risk for the development of hepatocellular carcinoma (HCC).

Decades after he had retired from baseball, Mick was beginning to develop stomach pains that he attributed to indigestion. When the stomach issues began to nag him, he chose to see a gastroenterologist who diagnosed him with cirrhosis, hepatitis C, and hepatocellular carcinoma.¹¹ His years of binge drinking had scarred his liver beyond recovery and the hepatitis was most likely an infection from the blood transfusions that he had received during his surgical knee repair in the 1950s and 1960s.

In 1995, Mickey Mantle passed away due to complications of his liver disease. While most people were angered by the self-destruction that ensued towards the end of his career, The Mick is still revered as one of the most exhilarating ball players of all time.

THE GAME MUST GO ON

To many, being a Yankees fan is a religious experience: Yankees Stadium is the cathedral, Bob Sheppard is the sermonizer, and the immortal jersey numbers are plastered on the balconies. Here, baseball fans can pay their respects to Lou Gehrig, Babe Ruth, and Mickey Mantle – past the fences that could hardly contain their moonshots.

Physicians, researchers, and health professionals must honor these heroes through their dedicated efforts, facing the opponent of Disease. In this game, there is no clear scoreboard, no seventh inning stretch, nor a clear end in sight. Inspiration can be drawn from The Iron Horse, The Babe, and The Mick. The game of baseball would never be the same after these men hung up their pinstripes for the last time. Hopefully, medicine will look back upon those men and women that defeat ALS and cancer in the same light: legends.

REFERENCES

1. Gallagher M, LeConte W. *The Yankee encyclopedia*. 6th ed. Champaign, IL: Sports Publishing; July 1, 2003.
2. Eig J. *Luckiest man: The life and death of Lou Gehrig*. New York: Simon & Schuster Adult Publishing Group; March 28, 2006.
3. Innes AM, Chudley AE. Genetic landmarks through philately - Henry Louis 'Lou' Gehrig and amyotrophic lateral sclerosis. *Clinical Genetics*. 1999;56(6):425–427.
4. Kiernan MC, Vucic S, Cheah BC, et al. Amyotrophic lateral sclerosis. *The Lancet*. 2011;377(9769):942–955.
5. Kasarskis EJ, Winslow M. When did Lou Gehrig's personal illness begin? *Neurology*. 1989;39(9):1243–1243.
6. Safire W, ed. *Lend me your ears: Great speeches in history*. 2nd ed. New York: W. W. Norton & Co.; May 7, 1997.
7. Maloney WJ, Weinberg MA. A comprehensive analysis of Babe Ruth's head and neck cancer. *The Journal of the American Dental Association*. 2008;139(7):926–932.
8. Bikhazi NB, Kramer AM, Spiegel JH, Singer MI. 'Babe' Ruth's illness and its impact on medical history. *The Laryngoscope*. 1999;109(1):1–2.
9. Chen M-S, Lin F-J, Tang SG, Leung W-M. Clinical significance of cranial nerve deficit in the therapy of nasopharyngeal carcinoma. *The British Journal of Radiology*. 1989;62(740):739–743.
10. Castro T. *Mickey Mantle: America's prodigal son*. Dulles, Virginia: Potomac Books Inc.; July 1, 2002.
11. Orman ES, Odena G, Bataller R. Alcoholic liver disease: Pathogenesis, management, and novel targets for therapy. *Journal of Gastroenterology and Hepatology*. 2013;28:77–84.