

# RUTLEDGE SR LAB OFF-SITE LEARNING PACKET DAY 4

## MEDICAL MYSTERY FOR CHAPTER 10



MASON UNIVERSITY NEUROLOGY CLINIC	
Name:	Guillermo A.
Age:	39
Height:	6' 2"
Weight:	196 pounds
Symptoms:	tired, lack of strength, muscle weakness, salivation

### HIS STORY

Guillermo was glad that his wife was pregnant with their second child. He was also happy that the abrupt weakness he had developed in his legs over the winter had disappeared. The physical therapy and weight training had helped him tremendously. However, in the first home game against Boston, Guillermo fell twice while trying to run the bases. It seemed like his legs just gave way while he was running. Over the next 2 days, his wife noticed that Guillermo had difficulty going up the stairs and asked him to take a break from practice, but he didn't want to be a quitter. Mishaps kept occurring, and Guillermo spilled his coffee one morning and dropped a plate after dinner one evening. The following Friday, Guillermo became so tired at practice that he had difficulty holding the bat. His teammates razzed him occasionally for his clumsiness, but when the team doctor asked how he was feeling, he said fine. He didn't want to be taken out of the game.

Over the next few months, Guillermo's wife noticed that he was dragging his right foot and he appeared clumsy while eating. He also had a transient episode of slurred speech that she hoped was just due to exhaustion. She was worried that he might have suffered from an ischemic stroke like the one that had left her father unable to care for himself. The team doctor finally agreed to recommend a neurological evaluation for Guillermo.

### THE EVALUATION

When I first saw Guillermo, it was clear that something was not right. Although his blood work, x-rays, ECG, and blood cultures were normal, Guillermo had developed a significant amount of muscle wasting. He mentioned that he often choked on his food and had a weak cough. Guillermo also complained of some cramping in his legs, which was not painful but annoying. I wanted to rule out a stroke, so I ordered a CT scan of the brain. It came back normal. During this time, Guillermo appeared to be getting worse, and he started having difficulty breathing. I immediately admitted him to the ICU where he was placed on a mechanical ventilator.

### THE DIAGNOSIS

The diagnosis of Guillermo was difficult because I initially thought that he had suffered a stroke or developed some type of muscle disorder. After excluding many neurological disorders, I finally concluded that Guillermo had developed amyotrophic lateral sclerosis (ALS), a rare medical condition commonly known as Lou Gehrig's disease. ALS is a serious neurological disease that attacks the nerve cells that control voluntary muscles. It may begin with muscle twitching or weakness in an arm or leg, or with the slurring of speech. Eventually, ALS affects the ability to control the muscles needed to move, speak, eat, and breathe, leading to paralysis and then death.

## THE TREATMENT

Unfortunately, there is no cure for ALS, nor is there any active treatment. My options for Guillermo all focused on palliative care to relieve his symptoms and maintain some quality of life after his diagnosis. These include providing support for breathing and nasogastric intubation for eating. The majority of the individuals with ALS have a life expectancy of only 1–3 years.

## CASE CLOSED

Seventeen months after Guillermo first developed symptoms, he died from the disease. However thanks to the involvement of many professionals, including doctors, therapists, dietitians, social workers, and hospice nurses, he was able to live long enough to see his second child born and to help his wife make arrangements for life without him.

## Discussion Questions

1. What is amyotrophic lateral sclerosis?
2. What is an ischemic stroke?
3. Guillermo was eventually unable to speak because he lost the ability to control the muscles around his vocal cords. A stroke patient sometimes loses the ability to speak because of the loss of blood flow to the brain. What is this called?
4. Use your word part skills to describe what is meant by nasogastric intubation.

**\*You still have to complete the medical mystery above!!\***

**\*\*Make your own medical mystery using the vocab from chapter 10. Have at least 4 questions. Use this medical mystery as a reference.\*\***