- 24. Why was Garfield at the railway station?
 - A. He was about to go to the White House.
 - B. He was going on holiday.
 - C. He was giving a speech
- 25. What the initial medical assessment of President Garfield.
 - A. He was likely to die within hours.
 - B. His injuries were not critical
 - C. They were optimistic about his survival chances.
- 26. Which technological advance was not used with President Garfield?
 - A. Air conditioning.
 - B. Metal detection.
 - C. Sterilisation. The one that might have saved him!
- 27. Where did Garfield die?
 - A. In the White House
 - B. In hospital.
 - C. On the Jersey Shore
- 28. Whose ideas did the American medical establishment reject.
 - A. Guiteau
 - B. Lister his belief in the need for a sterile field were accepted in the UK but not the US at this point
 - C. Bell
- 29. What was the problem with the metal detector.
 - A. They used it the wrong way up.
 - B. It squeezed the bullet.
 - C. It was not used in the right place. .. the wrong side of the body
- 30. Why did the doctors make Garfield's condition worse.
 - A. They misdiagnosed his condition.
 - B. They could not agree on treatment.
 - C. They did not establish a sterilised operating environment

Listening Script: President Garfield - a case study

Washington DC, July 2nd 1881 9.30. a.m

President James A Garfield arrives at the Balitmore and Potomac Railroad Station. He has been in office for less than four months is about to leave for his summer vacation.

A man approaches the presdient from behind. This is Charles Guiteau a mentally disturbed man with a grudge against Garfield.

Guiteau fires a pistol from point-blank range. Garfield cries out,"My God, what is that?", flinging up his arms.

Guiteau fires again. Garfield collapses. One bullet has grazed the President's shoulder. The other strikes him in the back, missing the spinal cord before coming to rest behind his pancreas.

Garfield is conscious but in shock, Aides carry him back to the White House. Eminent doctors are summoned to his bedside. Their initial prognosis is not good. "We don't think he will survive the night," they tell aides.

But by the morning they are becoming more optimistic. His vital signs are good - there appears to be a good chance of recovery. For seventy-nine days America waits while its best doctors work the most advanced medical technology to try and save the President. The navy even provides its prototype air conditioning technology. Fans blow air over a large box of ice and into the President's sickroom

At times Garfield seems close to recovery before succumbing to new infections. He also struggles to deal with the intense heat in Washingtong that summer.

In September Garfild is moved to the Jersey Shore but his condition worsens. On September 19th the president dies, two months before his fiftieth birthday.

What went wrong? The fundamental issue was that most American doctors rejected Lister's ideas, introduced in London a decade earlier. Doctors probed Garfield's wound with dirty, unsterilized fingers and instruments, attempting to find the location of the bullet. Many solutions were offerered - including the suggestion that they should hold the president upside down while two strong men squeezed out the bullet.

Alexander Graham Bell, inventor of the telephone, even invented a metal detector to pinpoint the bullet. Unfortunately the president's chief doctor insisted that the machine be use only used on one side of the body - the wrong side as it turned out. The only metal the detector detected came from Garfield's sick bed.

As John Dickerson explains, "the poking and the prodding by the - (*quote/unquote*) 'doctors and experts'..probably ended up killing Garfield by introducing all kinds of infections. Just as he was getting better they'd come in with a new cure and make him sicker..."

What the Garfield case shows is that a surgeon's clean hands may in the end prove more crucial to your survival than the fanciest medical technology..