

ESPEY (J.R.)

Typhoid fever after  
double amputation

+++

xxxx





**TYPHOID FEVER AFTER DOUBLE AMPUTA-  
TION; RECOVERY.**

By JOHN R. ESPEY, M.D.,

DIVISION SURGEON U. S. P., D. & G. RAILWAY, TRINIDAD, COLORADO.

D. M., twenty-eight years of age, an American, of Irish parentage, was a locomotive-fireman on a passenger-train, and was injured in a collision August 3, 1894. The accident occurred about 7 A.M., at a point eighty miles away, and I could not reach the scene of trouble until 1 P.M. Dr. Dayton, of Trinidad, accompanied me, as the telegram had stated that both legs were crushed. Upon our arrival we found the patient in a state of great shock, having lain for hours on an improvised bed on two car-seats. Both legs were crushed from a little above the middle of the leg to the foot. They had been but lightly wrapped by a physician, who did not have appliances at hand to do more. In addition to this surgical care a hypodermic injection of morphin had been given. A sympathizing passenger had also poured the contents of two half-pint bottles of very common whisky down the man's throat, which had thoroughly upset his stomach and materially added to his shock. We dressed his injuries aseptically, procuring boiled water from the engine. As the country was sparsely settled, without a suitable place to keep him, we concluded it was safer to move him to the St. Raphael Hospital in Trinidad, although we feared the eighty-mile ride before him. We placed him in a caboose, and with the engine and one trail car to lessen the jolting, we started for Trinidad. On the journey we



combated shock with heat and hypodermic injections of strychnin, digitalis, and brandy.

The patient was in extreme shock on reaching the hospital, but with increased facilities for combating this condition he rallied some during the night. Copious rectal injections of a hot saline solution were added to his treatment. On the morning of August 4th his temperature was  $102^{\circ}$ , and the pulse from 140 to 160 per minute. Notwithstanding that he had not more fully reacted from his shock, we deemed it best to amputate the right leg, as it was already dead and emitting a foul odor. I amputated at the junction of the upper and middle thirds at 10 A.M., assisted by Drs. Dayton and Thompson. Owing to extreme shock I amputated only the right leg, the left not being as yet a source of infection. The same restoratives were continued until the next morning, August 5th, when, the patient having more fully rallied from his shock, I amputated the left leg at about the same point as the right.

The patient reacted nicely from the second operation, and the left leg healed by primary union without further trouble. The right leg having been amputated while the patient was enduring considerable shock, the circulation was not so quickly reëstablished, and it healed partly by primary union and a small part at one side by granulation, without any sloughing, however. The temperature gradually returned to normal by the end of ten days, and the man's condition, although still one of considerable debility, was very satisfactory.

On August 25th the temperature began to rise, and continued to rise steadily, with slight abatement in the morning, until on the evening of August 30th it reached  $104.8^{\circ}$ . This was not explainable from the condition of the stumps, which were healed, except a small point of granulation on the left, nor were there any chills. However, the diagnostic symptoms of typhoid fever soon appeared, including the rose-spots, foul-smelling diarrhea,

and meteorism. The fever pursued a typical but rather severe course, owing, perhaps, to the already debilitated state of the patient.

On September 14th considerable ulceration was discovered on the right stump, which had not continued to heal since the onset of the fever, and the next day a bed sore appeared over the sacrum. Neither of these annoying symptoms continued to extend very seriously, as they were combated by strict cleanliness and turning the patient.

On September 18th all control of the sphincters was lost, and for the next nine days all evacuations from both bladder and bowels were involuntary and took place unconsciously. At the same time a low delirium set in, accompanied by a peculiar manner of holding the lower jaw to one side and with continual oscillations of it. The temperature, however, began to fall on the next day, September 19th, and on the morning of the 25th had declined to  $99.5^{\circ}$ , but in the afternoon, without apparent cause, the pulse ran up again to 136, the face became cyanotic, the breathing shallow, and it was thought dissolution was setting in. No antipyretics had at any time been used other than repeated sponge-baths. Indeed, the treatment had by this time become almost altogether supporting, and consisted of liquid nourishment, strychnin, strophanthus, and brandy. The brandy was during this attack of extreme depression increased to its highest limit during his illness, one tablespoonful being given every hour. The patient rallied, but the temperature rose to  $104^{\circ}$  the next day, September 26th, after which it fell continuously, reaching a morning normal on September 30th, and being normal on the evening of October 2d, from which time convalescence was gradual but uninterrupted.

The patient soon presented the bright-eyed appearance and developed the tremendous appetite, with rapid gain of flesh, so frequently observed in convalescents

from typhoid fever. The slight bedsore and the ulceration on the right stump healed rapidly, and the patient was discharged from the hospital in full health, with two good stumps and full use of both knee-joints. Being young and active, he was confident of being able to get about well on artificial limbs.



