Foul Odor Accompanies Leg Wound Case Study

A 62-year old diabetic black man presents in the emergency room with a swollen left leg with areas of blanching and blue mottling. A "foul odor" is coming from a dressed wound. The physicians remove the dressing and a brownish fluid is seeping from a wounded area. The fluid contains what appear to be small bits of the tissue. No pus appears to be present. The wound has a strong "rotten" odor.

Five days earlier, while at his work as a farmer, he caught the leg in his manure spreader, sustaining a deep, crushing, grossly dirty injury. His wife cleaned the wound as well as she could with soap and water, dressed it with clean gauze, and wrapped it tightly with an elastic bandage to stop the bleeding. The second day they redressed the wound and applied triple antibiotic ointment. The patient treated his pain with ibuprofen (Advil). He reported the pain was not very bad for the first 72 hours. In the past 24 hours, the leg swelled and the mottling began to appear. A foul odor and severe pain accompanied the swelling. His wife convinced him to come to the emergency room even though they did not have medical insurance.

1. What is your diagnosis in this case?
2. How should this wound be treated?
3. Is this a life-threatening condition?
4. Is it likely that the patient’s diabetes contributed to the problem as presented?