

# KAKELES (M.S.)

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## SENILE GANGRENE OF THE TOES; *AMPUTATION AT THE LOWER THIRD OF THE THIGH; RECOVERY.*

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LAST March (1891) I was called to see a lady, seventy years of age, who had been confined to her bed for three months. It was on the 19th of the month when I first saw her and received from her the following history: For twelve years she suffered with pains in the lower left extremity, which she supposed were due to a varicose ulcer situated a little above the external malleolus which now and then healed over, but oftener was in an open condition. During the latter part of the three months that she was bedridden the ulcer had healed, but the pains persisted around the ankle joint and foot. She had been treated for rheumatism until a small dark spot appeared on the big toe, about a week before I first saw her. The physician then had diagnosticated commencing gangrene, and ordered poultices to the parts; this had been kept, until I was called in.

On examining the patient, one would, from her appearance, have judged her to be ninety years old instead of seventy. Anæmic, haggard, and in a debilitated condition. Appetite poor. The pulse fairly good, and evidenced sclerotic condition of the vessels. The heart was weak. No murmurs. Lungs normal. There was no rise of temperature. The urine, from repeated examination, contained neither sugar, albumin, nor casts.

The skin was wrinkled and in a flabby condition. Over the sacrum there was an abrasion of epidermis and cutis about the size of the palm of the hand, as result of continual pressure. The left big toe was entirely gangrenous, the second in an incipient stage of mummification. From her general appearance and debilitated condition, and from the character of the gangrene, there seemed to me at the time no hurry to amputate the foot, or even the toes, until the nature of the progress of the disease was well established and the patient been put in a better condition, although I had in view at the time that an amputation above the middle of the leg would give better results than removal of the toes or even the foot.

The first indication to be met was the extreme weakness of the patient, and I resolved to stimulate her for a few days with tonics and good nourishment, in order that she could better be able to withstand the shock of an amputation. The gangrenous toes were treated antiseptically, and the course of the disease carefully watched until it commenced to spread to the back of the foot.

As my patient had reacted well to the tonics (strychnine, iron, etc.), which had been given for two weeks, and the bed-sore taken on a healthy granulation, it then seemed that the time had arrived when amputation was imperative. The question was at what place.

Koenig, in his *Surgery*, gives three causes of senile gangrene.

1. As consequence of inflammatory stasis, resulting from some slight injury, in such patients who have exhibited symptoms of impoverished nutrition of parts—such as coldness and insensibility of toes, fingers, etc.

2. Less frequently as a consequence of marasmic thrombus of the capillaries without preceding inflammation which leads to localized mummification of skin and gradual spreading.

3. Still less frequently gangrene as result of embolus or localized thrombus in a large arterial branch.

I attributed in my patient the cause of the gangrene to that class due to thrombus in the capillaries, and, on account of the unhealthy condition of skin above the ankle, due to her chronic ulcer, thought to amputate above the seat of the ulcer—namely,

the middle or upper part of the leg; but still the fear that my flaps might slough deterred me from taking this seat of election. The popliteal artery was also much sclerosed, which also led me to believe that the higher I would amputate (without forgetting the serious risks taken in removing so much of an extremity) the better chance I would have of avoiding a recurrence of the gangrene. I decided, therefore, after careful deliberation, that the prognosis would be far better by amputation above the knee than below, through a skin which in all likelihood, from its appearance, would have sloughed, and thus endangered my patient's life through septic infection.

On April 2d, as careful an aseptic operation (under a narcosis with the A. C. E. mixture) as could possibly have been done was performed through the junction of the middle and lower thirds of the femur. The circular method was used; the flaps sewed with silkworm gut, and three small drainage-tubes inserted—one at each end, and one in the middle of the wound. The stump dressed, and patient put to bed with a good pulse. She rallied well and primary union obtained, except where drainage-tubes were inserted. After four weeks the patient was walking around on crutches, and said she felt better than she had in the last twelve years. She left the city perfectly happy that she could once more walk about.

I report this case to confirm the value of Haidenhain's conclusions that amputation through the thigh, when once senile gangrene has commenced in the toes and spreads to the foot, is far better (barring contra-indications) than running the risk of rapid sloughing of flaps in a lower operation.

