



PALLIATIVE CARE CASE OF THE MONTH

“Shared-Decision Making in Limb Amputation”

by

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Volume 24, No. 142

Case: Mr. G is a 55-year-old man with CHF, recent CVA, and PAD with chronic wounds on his right leg who developed bacteremia presumably from his infected ischemic leg. The patient is bed-bound related to deficits from his most recent CVA. Prior to this admission he had been living at home independently, with support from siblings who lived nearby. He additionally has adult children who he communicates with regularly. He values his religious faith, being able to provide for his family, interact with his children, and does not want his children to see him sick. The wounds on his leg have progressed to gangrene extending up the calf and he is not a candidate for any additional revascularization surgeries. The surgical team recommends amputation at above-knee given the extent of his gangrene and discusses with the patient. The patient declines surgery and subsequently Palliative Care is consulted.

Discussion: A Common Consult

Inpatient palliative care consultations regarding goals of care clarification in patients considering an amputation of an extremity are common. These consults are often requested partly out of frustration by a surgical or primary medical team due to perceived patient reluctance or decision to not pursue amputation despite medical recommendation.¹ Many potential reasons exist to explain patient decision to go against medical recommendation that can be categorized most basically as either goal-concordant or potentially goal-discordant. Goal-concordant reasons include religious or spiritual beliefs regarding amputation, concern for imminent death or decline regardless of amputation, or prior exposure to the lived experience of amputation with friends or family members. Potentially goal-discordant reasons include insufficient medical explanation to patient at health-literacy-appropriate level, concerns regarding potential increase in pain or symptoms with amputation, or untended emotional or spiritual distress.

Clinical Indications

To better perceive the medical decision-making at play, it is helpful to review the clinical indications and risks or downsides of amputation. The goal of an amputation varies based on the indication but includes helping patients to live longer, to feel better, or prevent further disability. Indications for amputation span multiple surgical and medical specialties, including orthopedics, oncologic, vascular and general surgery.²⁻⁴ These indications, in order of decreasing frequency, are: chronic limb ischemia (72%), infection (15%), acute limb ischemia (4.0%), trauma (3.6%), and cancer (1.2%). Clinical overlap exists between patients with indications of chronic limb ischemia and infection, as patients with chronic ischemic wounds often present acutely for superimposed infection of wounds that fail to heal.

Gangrenous wounds are categorized as either ‘dry’ or ‘wet’ gangrene with wet gangrene indicating active, uncontrolled infection that is considered a relative surgical emergency to attempt source control.

Risks and Downsides

The table below shares inherent downsides and risks associated with amputation that should be disclosed to patients as part of the process of informed consent.⁵

Risks and downsides inherent to lower extremity amputation categorized into four distinct types	
Expected Downsides	<ul style="list-style-type: none"> • Perioperative surgical pain • Wound healing of weeks • Rehabilitation to learn to use prosthesis if that is goal
Possible Complications	<ul style="list-style-type: none"> • Fall on stump/dehiscence • Neuroma formation - painful • Phantom limb pain • Stump fails to heal
Reportable Risks	<ul style="list-style-type: none"> • Bleeding • Infection of stump, line-associated/blood infection • Further surgery such as a revision or higher level amputation
Failure to Achieve the Goal	<ul style="list-style-type: none"> • Infection progresses despite amputation and patient dies⁶ • Worsening functional status or loss of independence • Unable to ambulate with prosthesis -This more likely with AKA compared to BKA⁷

Shared Decision-Making in Amputations

In approaching a conversation with patients considering an amputation, a few key points can help to explore if the patient’s values support an amputation.⁸⁻¹⁰

- What worries does the patient have about an amputation?
 - Stay open-ended, they may surprise you
- Does the patient have medical or functional limitations that will prevent them from ever ambulating?
 - Is this important to the patient?
- Are the patient’s symptoms adequately controlled?
 - May be incapable of making rational decision if uncontrolled symptom (pain)
- Do any religious or cultural beliefs inform their perspective on amputation?

Personal details in the case published have been altered to protect patient privacy.

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Shared Decision-Making in Amputations (Continued)

- Would an amputation affect their functional status or disposition options?
 - Is being at home valuable to them?
- How willing and likely is the patient to undergo extensive physical rehabilitation over weeks and months?

Further Considerations:

Mr. G declined amputation initially for several weeks initially citing strong religious motivations. One month later after further discussions involving his siblings including reassurance and support from family members, the patient agreed to undergo amputation with the hope of being able to leave the hospital sooner and eventually return home where he could spend time with his family.

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