

Moving Towards the Possibility of
Amputation in Critical Limb Ischaemia:
Understanding the Phenomena

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Declaration of Financial Interests or Relationships

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I have no financial interest or relationship(s) to disclose

INTRODUCTION

Critical limb ischaemia

- First identified by Fontaine et al.¹ in 1954 within their PAD classification system as a subset of PAD determined by the presence of PAD-related rest pain or tissue loss
- Bell et al.² extended the definition in 1982 by adding the haemodynamic criteria of an ankle pressure <40 mmHg in the presence of rest leg pain and <60 mmHg in the presence of tissue necrosis
- Rutherford's classification³ stratifies the degree of ischaemia but has some limitations and is often used in conjunction with ulcer classification systems
- Wound, Ischemia, and foot Infection (WIFI) lower extremity threatened limb classification system⁴ published in 2014

BACKGROUND

Epidemiology⁵

- progression of PAD to CLI is 11.08%
- predictors of progression:
 - diabetes
 - heart failure
 - stroke
 - renal failure
- annual incidence of PAD at 2.35% and CLI at 0.35%
- prevalence of 10.69% for PAD and 1.33% for CLI
- Underdiagnosed

Treatment options⁷:

- Revascularisation
- Conservative care
- Amputation

Major amputation due to “dysvascular disease” is likely to double by 2050⁶

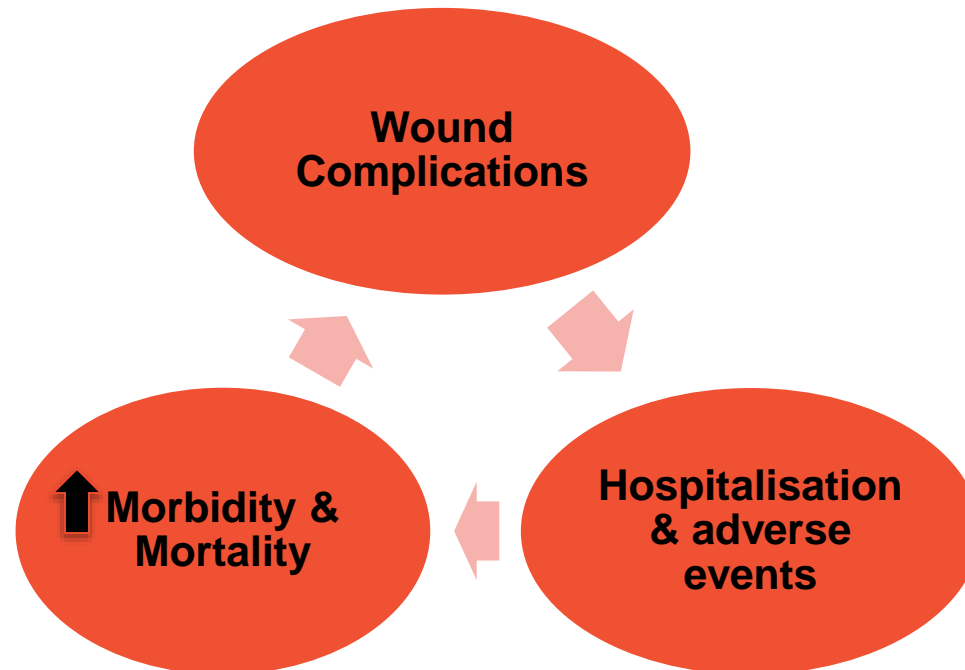
RESEARCH PROBLEM

Complex wounds + Recurrent infections + Difficult pain control

BUT

many **PATIENTS DELAY** proceeding to major **AMPUTATION** &

delay feeds into a cycle of



AIM

This study aims to explore the experience of making decisions in CLI when people have been advised to have amputation.

METHOD

Prospective longitudinal interpretative phenomenological study

Three publicly funded and one privately funded hospital in the inner metropolitan area of a large city in Australia

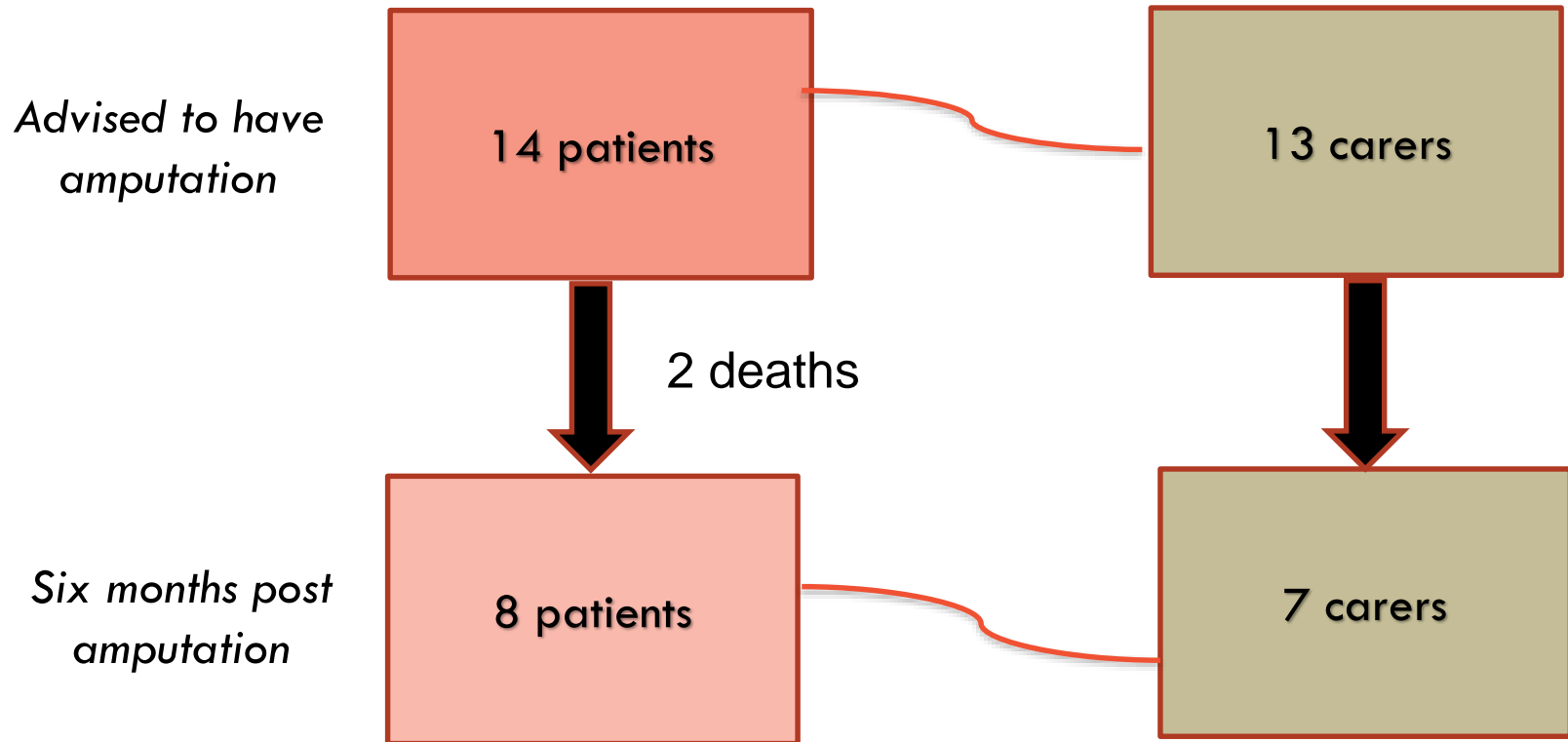
Rigour⁸ of qualitative study

Analytical framework using existential philosophies:

1. Maurice Merleau-Ponty⁹ - The body and embodiment
2. Martin Heidegger¹⁰ - Being in the world

Sample

19 patient & family journeys



42 semi-structured interviews, audio-recorded and transcribed verbatim

FINDINGS

Lead-in experience

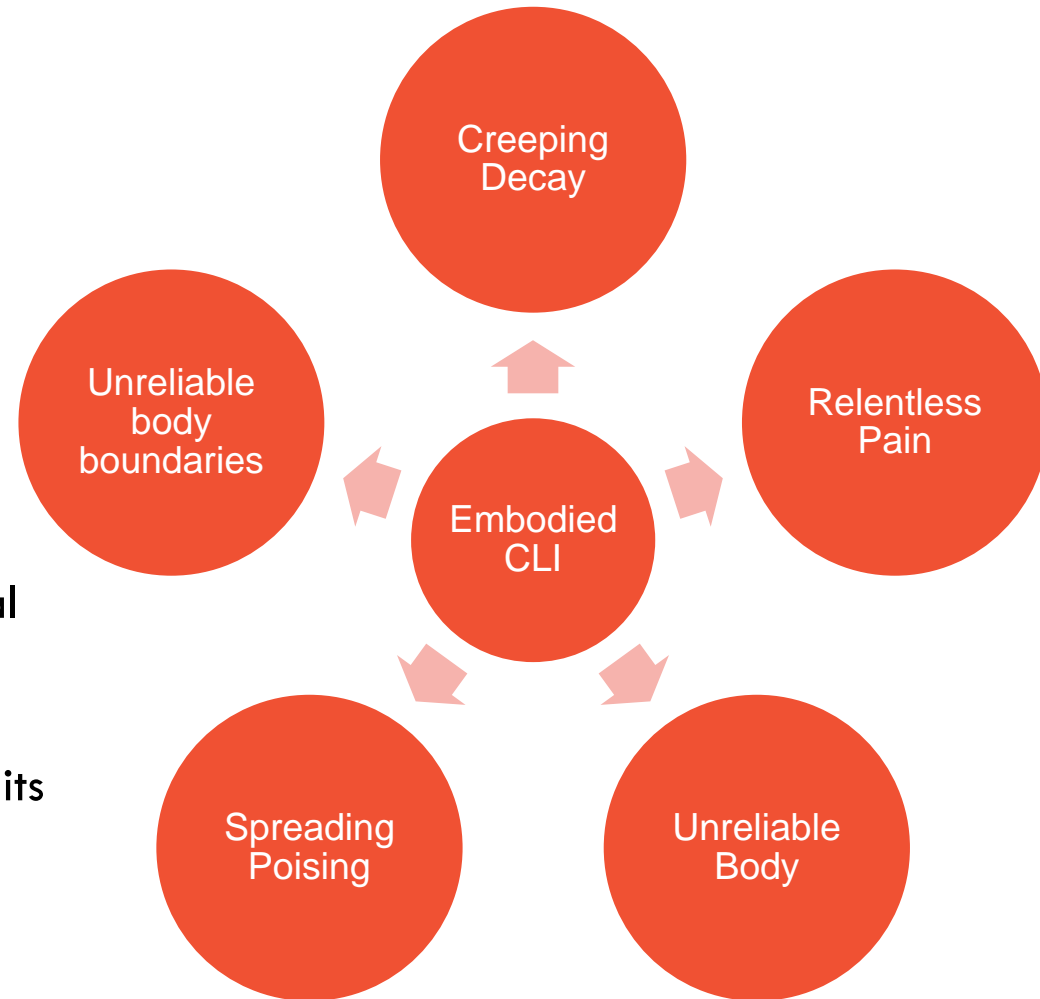
- Short versus long
- Multiple interventions

Frailty

- Physical
- Cognitive

Embodied Life – Merleau-Ponty

- Embodied life has
 - A distinct, extensive “directedness”.
 - A temporal rhythm: “a weaving back, forth, & through the demands of my organism & the integrative horizons of intentional life”⁹ (p.347).
- The body is regarded in the face of its tasks.



Creeping decay

Ulceration

The skin problem... worries me more than anything else... it was just an ongoing thing that was never going to heal... it was too far gone... it just got bigger, and bigger and bigger.

Anthony, committed to a BKA

He had an operation to put a tube into... his leg from his groin to allow blood to reach the extremities of his legs... He lost a couple of toes... he ended up back with complete blockages with the tubes. Dark spots appeared with ulcers on the right leg. The blockage is now not just in his toes and feet, it's halfway up his shin.

Eddie's daughter Eve, declining amputation

Creeping decay

Vascular decay

As I'm coming out of that [leg revascularisation] anaesthetic, I felt as if I'd been stood on my chest by an elephant... They took me straight back in surgery... they put stents in my heart. They're a bit scared to give me an operation [redo revascularisation] because of the heart attack. There's only a 30% chance of surviving the operation. Basically, what we're trying to buy [is] a bit of time.

Patrick, 66 years old with seven year PAD experience

We didn't know at the time how rough the angiogram dyes are on the kidneys... They're necessary for the vascular issue, but she also had a renal issue... the treatment was compromising her renal function. What she died of was renal failure... but if her kidneys hadn't failed, she would have lasted longer.

Tracey, daughter of Trudy who died two days after her amputation

Relentless pain

I had two choices here. Get rid of the pain or slit my throat. I don't care which comes first... When they say in the hospital: "One to ten?" (on the pain scale)... I was saying 15 to 20.

Leonard, 70 year old with long lead-in the urgent amputation

It [narcotic] takes too long to take effect. It takes up to an hour before he settles if he settles. But sometimes he doesn't... and he's either pulled out his IV, and there's blood everywhere or pulled out the catheter, and [he] is in a great deal of pain.

Eve describing her father's difficult to control pain

As soon as you go to sleep, within an hour, you'll wake up in pain and its bad pain. It's scream at the wall pain... I'd be awake in tremendous pain; it would get me up... So, it wasn't just the pain it was exhaustion as well, absolute exhaustion.

Francis, 64 year old before urgent revascularisation

Nights are the hardest. Hard as hell! ... Last night's sleep comprised of one hour. Not in one go, it's two thirty-minute sessions. I sleep on the bed with me foot hanging on the floor, and the foot sits on a pillow because if I lay it flat, you can forget about anything; that pain level!

Leonard waiting for admission for amputation

Spreading poison

Gangrenous poisoning

The gangrene has set into my toes, and the skin started coming off... If I let it go, it's going to go right through my body and kill me that way ... with Dad, it went right through his system because it was left too late...

Gordon

His mind... appeared to go, but that was delirium. The toxins may have been playing a part in that sort of confusion.

Ros recounting the experience of her father Robert as he waited for what became an urgent amputation

Septic poisoning

He's got really bad circulation problems... he's had infection in his toes, and pus and discharge... there's no blood flow below the knee into the foot, so the antibiotics have got nowhere to go."

Sam son of 83 year old Stephen

Drugs as poison

I had all these hallucinations. And I got to the point where I was really, really off me face. And they had to lock me in the bed. That's how bad it was. And I could tell you today, what some of those stories, some of those dreams were about. That's how vivid it was... It might have been the morphine.

Anthony after a repeat revacularisation

Morphine is making things worse because ... [he's] mixed up, muddled up. He's not all there."

Hope talking about her father Harry who was declining amputation

Shifting body boundaries

Initially, they thought they might just take the toes. So that was why they said to wait five days ... it looks like it's going to be down here (indicating near the ankle). But it wasn't until yesterday that they said here (indicating near the knee), and that upset me. I couldn't stop crying.

Nadine, 64 year old with first admission for CLI

I thought I'd give it a shot below the knee... I thought it would heal... It wouldn't heal, went black, necrotic... and so it was another course of revision.... probably three weeks between the two amputations.

Michael, failed attempt at conservative care and conversion for BKA to AKA

The unreliable body

I've been in the chair all night because I couldn't get out.

Trudy, uni lateral amputee on the day before her contra lateral limb amputation

I remember going down, and here I am on the floor! In the corner, all hunched up... I slept sitting on the lounge, the next morning... we called an ambulance... and it all went on from there.

Robert underwent urgent amputation after this experience

CONCLUSIONS

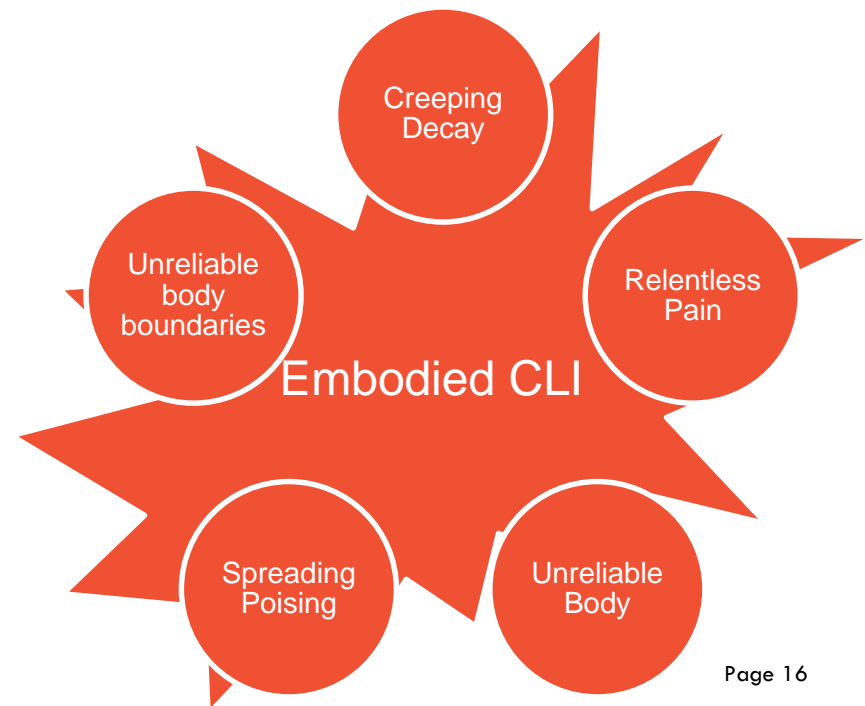
When the known body develops CLI, it's previously known ways of negotiating a meaningful place in the world cease to be available, and the functioning of the body becomes unclear and unreliable.

Onset of CLI resulted in profound disability and interruption to ways of previously Being-in-the-world

The lived-body was disrupted by *creeping decay* and shattered by the *relentless pain* and *shifting body boundaries*

CLI disrupted the core of the body resulting in severe instability of the physical body and its interleaving with the existential body

Disruption of the person's ability to make sense and use of the failing unreliable body



Implications for practice:

Identification and proactive management of CLI

Early offer of revascularisation and where this is not feasible or has failed, early flagging of the possibility of amputation

Facilitation of earlier amputation so that *the body with CLI* increases its chance of recovery

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LIMITATIONS

Phenomenology relies on researchers and participants being able to effectively share language and to some extent cultural understandings

The experiences of people not fluent in English were not included and limits the understanding of the patient and family experience within culturally diverse countries such as Australia