Case study

Am I better off with out it?: a case study of a patient having a trans-tibial amputation after 52 years of chronic lower limb ulceration and pain

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Abstract

This case study looks at a 71-year-old man who had 52 years of chronic lower limb pain and ulceration secondary to radiotherapy for an osteosarcoma. It discusses some issues surrounding amputation in such a case and raises early preoperative involvement by a multidisciplinary amputee rehabilitation team as a mandatory arm of management.

Introduction

Mr L is a 71-year-old man who underwent a right trans-tibial amputation (TTA) on 29th April 1996 at a Sydney Tertiary Referral Hospital.

Background

Mr L was bom on 26/5/25 and was in good health until he developed an osteosarcoma on one of his right tarsal bones in 1943 at the age of 18 whilst serving in the Australian Army during World War II. This condition was treated at the time by excision of the cancerous bone, bone grafting and subsequent radiotherapy. The treatment was a success in the sense that the condition was cured and Mr L is alive 52 years later to tell the story. Nevertheless Mr L has had ongoing debilitating impairment over the subsequent 52 years in the form of chronic ulcers and pain in his right lower leg. This was due to the large dose of radiation Mr L received at the time and the resultant damage this caused to the tissues of his right lower limb. He cannot recall either being out of pain or the ulcers on his right leg ever healing during the subsequent 52 years.

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Despite the ulceration and pain Mr L remained relatively active and functional over the years. He was employed as pay master with a major car manufacturing company and as a penciller with a bookmaker. He was also married and has one son. He was very active in the sport of snooker. During the 1980s Mr L won the "New South Wales State Open Snooker Championships" and achieved the maximum break of 147.

During the seventies Mr L was a keen golfer, at one stage having a handicap of 5. His unrelenting condition did however take its toll, resulting in long term sleep disturbance, depression and a general and slow decrease in his avocation activities over the years. Mr L did not wear shoes for 30 years, wearing slippers even to work. He had to give up both his golf and snooker and he feels that his ulcers and pain prevented him from making more of a career out of his obvious snooker talent.

Mr L did not have the concept of "amputation" discussed or offered to him ant any time over the 52 years subsequent to his initial surgery and radiotherapy. He says that the pain and the effect of the ulceration became "so unbearable" by April 1996 that he pleaded with his surgeon to remove his leg. At that time, a right trans-tibial amputation was performed. He was not given any rehabilitation review prior to that surgery.

Outcome

Subsequent to his amputation Mr L underwent an inpatient rehabilitation programme at Lady Davidson Rehabilitation Hospital in Sydney from the 6th May 1996 until the 19th July 1996.

Mr L was discharged from Lady Davidson Hospital walking independently with a stick

utilising a right patellar tendon bearing prosthesis with modular shank, SACH foot and a suprapatellar cuff suspension. He was fully independent in all his activities of daily living and returned to live in his modified house with his wife.

He presented to the amputee clinic on 19th August 1996 "delighted" with the result of his amputation and subsequent use of the trans-tibial prosthesis. A driving assessment had been completed and Mr L was back driving his car with modifications. He had also returned to snooker. Mr L said the improvement in his overall sense of well being was remarkable. He noted that he was without pain and ulceration for the first time in 52 years and had recently been sleeping soundly for the first time in years. He openly declared that he was a "new man" with a "new lease on life".

Discussion

This case raises again the question of if and when to amputate in circumstances such as these when a patient has long term chronic ulceration, of any aetiology, with little to no chance of healing (chronic osteomyelitis is another possible aetiological factor). This question is particularly vexing when chronic pain is an issue and the combination is having a significant effect on the patient's function and quality of life. It is well known that amputation does not invariably eradicate pain in such cases and this fact certainly needs to be taken into consideration.

The question has no one or easy answer. The decision always has to be made by the patient. Thanks is not forthcoming after such a major life event as having a limb amputated if the decision is thought to have been less than freely made. For this reason significant time, often many years, is needed for the patient to experience what effect the ongoing impairment is having.

The decision needs to be made with all the information at hand and may be made earlier to the overall benefit of the patient. 52 years is a long time as in the case of Mr L. He is totally convinced that he would have had this amputation years, if not decades, earlier if he "knew what he knows now". It is easy to make such a statement with the benefit of hindsight and as Mr L succinctly puts it, the decision to let someone "chop your leg off is still the decision to let someone "chop your leg off' no matter what information is to hand.

The important concept is to manage such cases in an interdisciplinary environment. Even though the surgical side of the issue is always vital to consider it may be of no greater importance than other factors when making the decision. The medical, surgical, physical, functional, psychological, social, vocational and avocational aspects must be taken together and considered in depth. These issues must be presented to the patient in a way that he or she can synthesise and make sense of. Even enabling the patient to meet with a successful prosthesis user and see what is involved in prosthetic use can give a perspective not otherwise possible.

An early referral to an interdisciplinary rehabilitation service, that specialises in amputee management and is preferably coordinated by a rehabilitation physician, should be put in place. Such a review would only complement the surgical perspective and is appropriate preoperatively in all prospective or potential amputees, not just the "complicated and drawn out" cases such as Mr L's.

The case described, of chronic ulceration, is obviously not common in our developed society, particularly with refinements in the use of radiotherapy surgery; antibiotics etc. Nevertheless it is not unknown. Such situations though are more prevalent in third world societies including some parts of Australia, tropical climates as well as war and mine ravaged parts of the world. Unfortunately it is in these areas that the integrated rehabilitation concept is probably least known and available and this situation must be addressed.

No matter what branch of medicine or allied health is involved, the maximisation of the patients' quality of life should be paramount. A rethink of Mr L's last 52 years may help to refine practices.

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