



OPEN ACCESS

# Integrating palliative surgery and palliative care

Amanda Charity Sommerfeldt,<sup>1,2</sup> Natasha Austin,<sup>1,3</sup> Monica Londahl ,<sup>2</sup> Konrad Klaus Richter<sup>2,3</sup>

<sup>1</sup>Hospice Southland, Hospice, Invercargill, Southland, New Zealand

<sup>2</sup>Dean's Department, University of Otago, Dunedin, Otago, New Zealand

<sup>3</sup>Surgery, Southland Hospital, Invercargill, Southland, New Zealand

## Correspondence to

A/Professor Konrad Klaus Richter, University of Otago, Dunedin 9016, New Zealand; [konradklaus.richter@gmail.com](mailto:konradklaus.richter@gmail.com)

Received 28 April 2022

Accepted 5 May 2022

Published Online First

6 July 2022

## ABSTRACT

We report a challenging patient journey at a rural New Zealand hospital affiliated with a hospice programme. This case illustrates the complexities and rewards of achieving a valuable and sensible collaboration among various teams to ensure the best possible outcome for surgical patients receiving palliative care.

## BACKGROUND

The best possible outcome for a patient treated with palliative intent is not easily defined. Frequently there is discord between the maximum extension of one's life and the quality of one's final days. Despite potential benefits of and advances in surgical palliative care, surgeons might remain reluctant to offer palliative surgery or partner with palliative care specialists.<sup>1,2</sup> In addition, there is a gap in training and guidance for palliative care providers regarding when and how best to partner with surgical colleagues. Patients are typically referred to specialist palliative care and hospice when disease-modifying treatment options are presumably optimised, exhausted, unavailable or declined. There is little to guide palliative care providers who wish to refer such patients back to specialists like surgeons.

## CASE PRESENTATION

A 57-year-old Caucasian male patient<sup>4</sup> was treated for over 6 years during a complex and often uncertain palliative journey. He was diagnosed with a low rectal cancer managed with abdominal perineal resection following radiation therapy. He received delayed postoperative chemotherapy. Two years later, CT showed left upper lung metastasis, followed within a few months by the emergence of a sacral recurrence.

## TREATMENT

The patient was treated with preoperative chemotherapy, radiotherapy to the pelvis and a subsequent left upper lung lobectomy, all with curative intent. The patient then underwent pelvic exenteration at a tertiary hospital that included cystoprostatectomy, S1–S2 sacrectomy with S2 nerve root sacrifice, ileal conduit formation and vertical abdominis musculocutaneous flap. Pain management remained a substantial challenge during his month-long hospitalisation, and the patient was ultimately transferred to the hospice inpatient unit (IPU). Eight months later, positron emission tomography demonstrated bilateral lung metastases, and he declined further palliative chemotherapy.

Despite frequent discussions about treatment goals and advance care planning, with the patient stating clearly and consistently that he did not wish to be hospitalised or have further disease-modifying treatments, he presented acutely to the hospital several more times with partial small bowel obstruction, urinary tract infection sepsis, pain in his leg or around his ileal conduit, difficulty managing care needs in the home, and delirium. Quality of life and symptom control was severely compromised due to his pain and discomfort caused by the small bowel obstruction and parastomal hernia (figure 1). At this stage, he and his spouse wished to explore operative options, so the hospice team requested input from surgical colleagues.

Though several general surgeons declined to operate at this stage, one surgeon agreed to proceed after repeated meetings and discussions. This palliative procedure was challenging because previous complex operations resulted in severe adhesions around a parastomal hernia. There was an unexpected finding of a large metachronous caecal cancer infiltrating the ileal conduit. The surgery involved extensive adhesiolysis, small and



© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** Sommerfeldt AC, Austin N, Londahl M, et al. *BMJ Supportive & Palliative Care* 2024;**14**:e580–e582.



**Figure 1** Preoperative coronal CT abdomen and pelvis image demonstrating small bowel obstruction and the parastomal hernia in the right lower abdomen, involving small bowel and caecum with a metachronous caecal cancer infiltrating into the ileal conduit.

large bowel resection, partial resection of the wall of the ileal conduit and partial abdominal wall resection with surgical repair of the hernia.

### OUTCOME AND FOLLOW-UP

The patient presented to the emergency department on a few occasions and was hospitalised seven more times for a few days, but the stomal issues were well managed after the final operation. He received five 2 Gy fractions of palliative radiotherapy to the chest for dyspnoea related to lung metastases and had three other hospice IPU admissions, primarily for respite. The patient remained at home for 7 months after his final operation, without the preoperative episodes of debilitating severe pain, and enjoyed a good quality of life, according to him and his wife. The patient and his wife ultimately agreed to long-term aged residential care placement due to increased care needs.

He died at the rest home 2 weeks after his final hospital discharge.

### DISCUSSION

This patient's journey represents a particularly challenging and complex palliative treatment. Therefore, it is crucial to assess the various players involved in his treatment. The Hospice Medical Director led the palliative care team. Three surgeons were involved: one performed the

primary resection, a second surgeon performed the extensive salvage exenteration and a surgical oncologist performed the final complex palliative surgery for 7 months before death. Additional team members included:

- ▶ The general practitioner,
- ▶ The medical oncologist,
- ▶ Hospital-based physicians,
- ▶ Pain specialists,
- ▶ The multidisciplinary hospice team,
- ▶ Community-based district nurses and carers,
- ▶ The aged residential care facility personnel.

Only one person can answer the obvious question of whether our patient received optimal treatment: the patient himself. He may be biased since he only knows his journey, and it is difficult to speak to the road not taken. The patient stated several times that he was happy he had the final surgery. Still, it is difficult to know if the benefits outweighed the burdens from a medical systems standpoint, given the patient's 7-month postsurgical course. The palliative surgeon and surgical oncologist were tasked with providing truthful information without unduly destroying hope. The patient's age influenced the decision—he was relatively young at 63 years at the time of death—as did the aggressiveness of the tumour, the extent of the disease and the patient's complex and refractory symptoms that were almost impossible to control.<sup>2</sup>

There is little evidence to support whether and how best to integrate palliative care services and principles into general surgery. There is even less evidence to guide integrating surgical management into palliative care plans.<sup>3</sup> Guidance for community providers is conspicuously lacking.

Though the literature provides only sparse guidance for managing complex palliative cancer patients, there is general agreement that treatment should be individualised with support from a multidisciplinary team and collaboration with experienced and committed surgeons with a cancer-focused practice.<sup>2</sup> The expectations and goals should be clarified with patients, families and team members. Discussions and care plans should be clearly documented with clinical decision-making supported by the incorporation of all available clinical information, scores, predictive models and calculators. The operating surgeon should have vast experience in operating on complex cancer patients and insight into his limitations. Even with these efforts, there will always be limitations, and an element of uncertainty will remain and needs to be acknowledged.<sup>4 5</sup> This uncertainty will be readily accepted by the patient if the patient–doctor relationship is based on trust and respect and if we acknowledge that we, as humans, are fallible.

**CONCLUSION**

Despite growing recognition of the need for holistic palliative care in cases of incurable malignancy, it is not entirely clear how best to integrate palliative principles into surgical care. Additionally, the surgeon's role in the multidisciplinary palliative care team is not yet well defined. A productive, collegial and collaborative working relationship between surgeons and palliative specialists is crucial, particularly in complex and challenging scenarios like the one described in this case report.

**Acknowledgements** The authors wish to acknowledge the patient, who provided written informed consent for his case to be used.

**Contributors** ACS is first author and was the lead-clinician involved in the case management itself, conducted research and revised the first draft. NA designed and outlined the overall paper, conducted research and wrote a first draft of the article. ML made several revisions to the draft, finalised the draft, conducted research and submitted the paper. KKR is guarantor for the paper. He assisted with outlining the paper, was involved with management of the case itself, revised and finalised the draft and oversaw the whole process.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Consent obtained directly from patient(s)

**Provenance and peer review** Not commissioned; internally peer reviewed.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

**ORCID iD**

Monica Londahl <http://orcid.org/0000-0002-1021-5879>

**REFERENCES**

- 1 Ferrell BR, Chu DZJ, Wagman L, *et al*. Online exclusive: patient and surgeon decision making regarding surgery for advanced cancer. *Oncol Nurs Forum* 2003;30:E106–14.
- 2 McCahill LE, Krouse RS, Chu DZJ, *et al*. Decision making in palliative surgery. *J Am Coll Surg* 2002;195:411–22.
- 3 Lilley EJ, Khan KT, Johnston FM, *et al*. Palliative care interventions for surgical patients: a systematic review. *JAMA Surg* 2016;151:172–83.
- 4 Hui D, Maxwell JP, Paiva CE. Dealing with prognostic uncertainty: the role of prognostic models and websites for patients with advanced cancer. *Curr Opin Support Palliat Care* 2019;13:360–8.
- 5 Chu C, White N, Stone P. Prognostication in palliative care. *Clin Med* 2019;19:306–10.