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Editorial

Cancer cachexia syndrome: Reflecting on 20 years of providing cancer cachexia care as the leader	Check
of an interdisciplinary team in an Australian cancer center	

Why would such a high prevalence of high-impact syndrome have relatively limited clinical attention paid to it? This is what first intrigued me as a palliative medicine physician and resulted in me spending over 20 years developing dedicated services to support those suffering from cancer cachexia (CC). We must be able to do more to improve the care for those with cachexia.

Cancer cachexia is a complex, multifactorial syndrome that affects an estimated 50% of all people diagnosed with cancer, including up to 80% of those with advanced disease.^{1–3} Cachexia is characterized by the ongoing loss of skeletal muscle mass (with or without the loss of fat mass) that leads to progressive functional impairment.⁴

Those who have early-stage disease amenable to a definitive curative intervention such as surgery may have CC as a transient problem though it may still put them at higher risk of surgical morbidity.⁵ For those with cancer as a chronic illness, this often remains a significant ongoing burdensome part of their life. I chose the term illness very deliberately as not only does CC have many biological sequelae but also has a massive impact on people's wider psychosocial life.^{6,7}

Traditionally it has been considered that all cancer clinicians have a role to play in the care of someone with cancer cachexia. In practical terms, this care has mostly fallen to dieticians^{8,9} who have much to offer but may struggle to maximize their impact without other colleagues addressing symptom control issues, providing psychosocial support, and prescribing targeted exercise.³ More recently, the importance of exercise in cancer rehabilitation has grown particularly in the cancer survivorship sector.¹⁰ Intensive treatment regimens for some cancer cohorts, such as head and neck cancers, have included prevention and treatment of CC in a much more proactive structured way.

There has been much less research given to clarifying what the most effective clinical service models are for CC.³ This is in stark contrast to extensive literature, which helps us better understand the pathophysiology and evaluation of pharmacological interventions. Some literature on the patient experience and their information needs has provided us insights into what else we need to prioritize.¹¹ In essence, how we provide care for CC has not evolved dramatically over the last 20 years. Some have been forthright about the need to focus on multimodality treatment and multimodality clinical trials like almost all other aspects of cancer care.¹² Many members of our community remain unaware that up to 20% of cancer deaths may be largely attributed to CC, and thus, underestimate the importance of addressing it.³

It is useful to consider both the disease and illness frameworks of health. From a cachexia standpoint, the disease side has mostly focused on symptom control, anthropometric assessment, nutritional counseling, exercise, and pharmacological approaches. Others have focused on the illness experience from the patient and family perspectives, and this has highlighted many issues, including altered body image, social isolation, functional decline, relationship impacts, and the hugely detrimental impact on their quality of life.¹¹ Integration of the disease and illness frameworks is key in delivering true person-centered healthcare. There is a real opportunity to provide patients with a sense of self-mastery in the treatment of CC, and this is often aligned with a sense of hope and positivity. Hope remains a core construct for most living with an advanced illness such as cancer.

The question thus remains how best to provide cancer cachexia care in our complex health systems. More recent literature about how CC may influence the ability of people to tolerate disease-modifying treatments such as chemotherapy has brought cancer cachexia back into the limelight.¹³ The utilization of routine modalities such as computed tomography (CT) and magnetic resonance imaging (MRI) scanning to determine body composition and the prognostic significance of skeletal muscle mass also offer new opportunities.¹⁴ This may be particularly important in geriatric oncology and sarcopenic obesity. The latter may be vastly underestimated in many countries where obesity is commonplace. Frailty is an increasingly common clinical picture that has relevance in cancer care, especially in aged cohorts.

There are now several consensus definitions of cachexia,^{4,15} which include distinct phases of CC. It seems likely that the interventions and goals for the stages of precachexia, cachexia, and advanced cachexia will differ.

So, what opportunities for improved care should we consider given the diversity of our health systems and the critical role cancer nursing has in the care of our community.

There is not much undergraduate or postgraduate curriculum time afforded to this common problem, and this would seem an important place to start. Likewise, the previous lack of consensus definitions and some therapeutic nihilism has resulted in limited professional development regarding CC throughout the cancer sector.⁶

Nutritional screening and assessment to identify those most at risk is critical, and important consensus guidelines have begun to highlight some aspects of this.^{8,9,16} How we routinely use existing imaging modalities such as CT and MRI in CC is yet to be determined even though they are routinely used in cancer diagnosis and staging.¹⁴ This may be particularly useful in sarcopenic obesity when other measures such as weight, body mass index (BMI) and anthropometry may have significant limitations. Having better normative data for different cultural groups, given the dependence until recently on data from westernized clinical cohorts, will allow a more accurate picture of more diverse ethnic groups. Tools such as distress screening or the routine clinical use of

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quality-of-life instruments that include CC may also prove useful. The use of functional assessment of anorexia-cachexia therapy (FAACT)¹⁷ that explores cachexia impact symptoms in depth is an example. Nutritional assessment tools such as the Patient-Generated Subjective Global Assessment (PGSGA) have already been shown to have prognostic as well as clinical value.18

Improved communication and explanation for people with CC would seem an obvious place to start, and this should not be the sole responsibility of those in dietetics.¹⁹ Many patients describe how concerned they are about cachexia impact symptoms yet feel these concerns are not adequately addressed.¹¹ Cancer nursing, and those advanced practice nurses are well placed to provide a key role in the continuity of care, information provision, exploration of concerns, and for timely referral to other professionals. Underpinning all of this is the provision of hope and self-empowerment irrespective of the disease-modifying options open to the individual.

Questions remain whether a dedicated cancer cachexia team providing an integrated, individualized care plan will demonstrate better outcomes than the existing somewhat compartmentalized multidisciplinary approach. There are some initial data to suggest that such services may warrant further study.³ Various multidisciplinary models have been described but are rare in routine cancer care.^{3,20–24}

The promise of better tolerance and capacity to complete "on-time, on-dose" disease-modifying treatment may help bring new focus to this age-old devastating clinical syndrome.

Declaration of competing interest

None declared.

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Peter Martin

Clinical Communication and End-of-Life Care, School of Medicine, Deakin University, Geelong, Australia Centre for Organisational Change in Person-Centred Healthcare, Faculty of Health, Deakin University, Geelong, Australia

E-mail address: peter.martin@deakin.edu.au.