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Head: Understanding and Addressing Challenges in Gastric and Oesophageal Cancers

Gastric and oesophageal cancers are becoming more prevalent in Australia.

Treatment for H Pylori and better access to endoscopy has helped address gastric cancer incidence, however an ageing population and increased prevalence of obesity has resulted in a steady increase in oesophageal cancer incidence over the last 30 years. Unfortunately, survival outcomes for both cancers continue to be disappointing, with five-year survival rates of 23% for oesophageal cancer and 36.8% for gastric cancer.

Consumer and practitioner awareness is key to early detection and improved survival.

The rarity of oesophageal and gastric cancers has so far limited use of broad screening tools in the Australian population. At present, current recommendations focus on early investigation of so-called 'red flag' symptoms, and early referral to specialist centres for urgent endoscopy. (1) These include:

- new dysphagia
- unexplained weight loss
- unexplained iron deficiency anaemia
- new reflux refractory to anti-acid medication
- haematemesis/melaena

People at earlier stages of cancer at time of diagnosis have far greater survival at five years. Increased consumer and clinician awareness of red flags symptoms for upper gastro-intestinal cancers is important to address the current shortfall in our diagnostic capabilities, which include insurmountable waiting times at every level of access to healthcare.

With an aim of improving awareness and navigating access to endoscopy services, Pancare Foundation has developed an RACGP accredited GP education module that addresses these issues, giving primary care health professionals a framework for approaching what is often a difficult system to navigate. <https://www.arterialeducation.com/c/trust-your-gut-89>

Gastric and Oesophageal cancers disproportionately affect marginalised groups

Marginalised populations such as Aboriginal and Torres Strait Islander people, new migrants, refugees, and people from lower socioeconomic groups are disproportionately affected by gastric and oesophageal cancers, with higher incidence, later stage at diagnosis and higher mortality.

The social determinants of health (including factors such as opportunities for education, employment, and where one lives), play a central role in these inequities. (1, 2) Additionally, cultural determinants (such as the effects of colonisation on Aboriginal and Torres Strait Islander people, and lack of access to culturally safe healthcare and health education resources) and commercial determinants (such as activities driven by the alcohol, tobacco and fast food industries) contribute to health disparities such as delayed diagnosis and impact the overall health of populations. (3, 4)

Targeted population-led strategies are crucial to addressing health inequities in these marginalised groups.

Holistic cancer care considers both improving survival and quality of life.

Treatment close to home has traditionally been prioritised by patients, but the complexity of gastric and oesophageal cancer care requires a highly specialised, multidisciplinary approach. This care is well established as the gold standard for Upper GI cancer and should be included as part of every patient's cancer journey. This includes involvement of surgical subspecialty services, medical and radiation oncology, as well as specialised anaesthetic, intensive care and radiology services. However, just as importantly, access to nutritional support, specialist cancer care nurses and specialist palliative teams has been shown to improve both survival as well as quality of life for patients and their carers. (3)

Patients and their families experience significant adverse physical, emotional, social and financial effects arising from the diagnosis of cancer and its treatment, which require supportive care services, including specialised for marginalised groups, to be delivered in a timely and integrated way alongside other treatments. Supportive care is described as one of the key pillars of cancer care within the Optimal Care Pathways for oesophagogastric cancer. (4) Access to supportive care services however can be heterogenous across Australia between health care services. Whilst this gap is currently being addressed by services such as Pancare, OCAGI, and support services through Cancer Council Australia, further investment in supportive care resources is necessary to integrate supportive care equitably through healthcare services across Australia.

Research funding for UGI cancers has been relatively small.

Between 1996 to 2018 funding for breast cancer research was 3.1 times the funding for all upper GI cancers including gastric, oesophageal, liver and pancreatic cancers. The reason for this discrepancy is complex. The relative rarity of these cancers, and lack of commercial or governmental incentives certainly contribute, but there is without doubt a need for more investment. Australia has a relatively small cohort of patients in the global burden of Upper GI cancers. Maximising the impact of research spending will need to consider our national strengths, and collaboration with international projects is key to broadening the impact of the work. It is hopeful that within the new Australian Cancer Plan, there will be scope to increase funding to gastric and oesophageal cancer projects.

New technologies in early detection and targeted treatment are improving outcomes.

Emerging technologies show some promise in detecting gastric and oesophageal cancers in their early stages.

Tools such as the Cytosponge show promise in non-invasive screening. (5) In an outpatient setting the Cytosponge, contained within a dissolvable outer capsule on a long string, is swallowed and then pulled back out through the mouth. On withdrawal, the sponge samples cells lining the oesophagus in a similar manner to a pap-smear test. It is currently being used across Scotland as part of the NHS's response to COVID-19 backlog and difficult access to endoscopy for patients with new red flag symptoms, and emerging data has been extremely promising.

The UK based AROMA1 trial aims to identify biomarkers sensitive to oesophagogastric malignancies. The study will attempt to determine if volatile organic compounds produced by cancers and cancer associated bacteria are a useful early screening test.

Globally, there have been some significant improvements in treatment of oesophageal and gastric cancer in the last 20 years. Introduction of perioperative chemotherapy or chemoradiotherapy regimens in the last decade have shown significant improvements in survival. For patients who

undergo curative treatment, oesophageal cancer survival at five years stands at over 50%. PBS funding in 2022 introduced adjuvant immunotherapy treatment Nivolumab for oesophageal cancer patients who do not have a complete pathological response to neoadjuvant treatment. (6) Further research into the utility of immunotherapy in oesophagogastric cancer shows some limited promising results, however time will tell whether this will provide a significant step forward in improving outcomes in oesophagogastric cancer.

Collaboration and Education the key to improving outcomes

The escalating prevalence of gastric and oesophageal cancers in Australia underscores the pressing need for heightened awareness, early detection strategies, and equitable access to comprehensive care. Disparities in cancer burden among marginalised groups highlight the imperative need of addressing social, cultural and commercial determinants of health, barriers and equitable access to timely and quality care. A holistic approach to cancer management, encompassing multidisciplinary care, supportive services, and population lead action is essential for enhancing both survival and quality of life. By fostering collaboration and prioritising education, we can collectively strive towards improving outcomes and reducing the impact of gastric and oesophageal cancers on individuals and communities.

References

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