Open Access

Advanced Small Bowel Adenocarcinoma

Yasin Muhammad*

Division of Adolescent and School Health, Centers for Disease Control and Prevention, Atlanta, Georgia, USA

Editorial

Small bowel adenocarcinoma (SBA), which can be found in the duodenum, jejunum, or ileum, is a rare cancer that accounts for 3–5% of all gastrointestinal cancers. Because of the non-specific nature of clinical symptoms, approximately one-third of these tumours are diagnosed at an advanced (unresectable or metastatic) stage. It is possible that trends toward earlier diagnosis will be seen in the future with the development of improved imaging techniques and advances in endoscopy, such as enteroscopy and capsule endoscopy. The tumour stage at diagnosis was localised or resectable in 54% of the NADEGE cohort study participants, locally advanced, unresectable in 5.5 percent, metastatic in 33.5 percent, and undetermined clinical stage in 7%.

The TNM classification is the most important prognostic factor in SBA, as it is in many other cancers. Despite a slight improvement in the median Overall Survival (OS) for localised disease, the prognosis for SBA remains poor. The 5-year Overall Survival (OS) rate for stage I disease is 50%, 40% for stage II, 10–40% for stage III, and less than 5% for stage IV disease. Other risk factors include male gender, duodenal location, poor differentiation, and SBA associated with Crohn's disease as opposed to de novo SBA. Although retrospective studies revealed the ability to resect limited metastatic disease, no prospective studies were carried out.

Resection of the primary tumour should be considered only in the case of primary tumour symptomatology, such as perforation, bowel obstruction, or uncontrolled gastrointestinal bleeding, in the case of unresectable metastatic disease. In all other cases, palliative chemotherapy is the primary mode of treatment for metastatic SBA. This review focuses on the role of systemic therapy, surgical metastasectomy, and novel therapies in advanced SBA, such as targeted therapies and immunotherapy [1-5].

Chemotherapy

Although no randomised clinical trials have yet shown that systemic chemotherapy is superior to best supportive care alone, retrospective studies have shown that palliative chemotherapy is superior. One of the earliest retrospective studies reported 12-month versus 2-month Overall Survival (OS) for systemic chemotherapy and best supportive care, respectively. Several retrospective or prospective studies have since reported a survival benefit

for chemotherapy administration compared to best supportive care alone, with a median OS ranging from 9 to 19 months in patients receiving palliative chemotherapy versus only 2 to 13 months in patients receiving palliative care.

Targetedtherapies

Due to similarities in molecular alterations and effective chemotherapy regimens between SBA and colorectal cancer (CRC), targeted therapies commonly used in CRC, such as anti-epidermal growth factor receptor (EGFR) or anti-vascular endothelial growth factor (VEGF), were studied in advanced SBA.

Immune checkpoint inhibitors

Immune Checkpoint Inhibitors (ICIs) have emerged as the cornerstone of immunotherapy in a variety of cancer types, with antibodies primarily targeting anti-programmed cell death protein 1 (PD-1), anti-programmed cell death ligan-1 (PD-L1), and anti-cytotoxic T-lymphocyte antigen-4 (CTLA-4). ICI predictive biomarkers such as PD-L1 expression, combined positive score (CPS), microsatellite instability (MSI), and tumour mutational burden (TMB) are currently used in a variety of cancers. Predictive biomarkers for the efficacy of ICI in SBA are still being investigated.

References

- Pedersen, Katrina S., Kanwal Raghav, and Michael J. Overman. "Small bowel adenocarcinoma: Etiology, presentation, and molecular alterations." J Natl Compr Cancer Netw 17 (2019): 1135-1141.
- Chen, Emerson Y., and Gina M. Vaccaro. "Small bowel adenocarcinoma." Clin Colon Rect Surg 31 (2018): 267-277.
- Benson, Al B., Alan P. Venook, Mahmoud M. Al-Hawary and Mustafa A. Arain, et al. "Small bowel adenocarcinoma, version 1.2020, NCCN clinical practice guidelines in oncology." J Natl Compr Cancer Netw 17 (2019): 1109-1133.
- Pedersen, Katrina S., Nathan R. Foster, Michael J. Overman and Patrick M. Boland, et al. "ZEBRA: A multicenter phase II study of pembrolizumab in patients with advanced small-bowel adenocarcinoma." *Clin Cancer Res* 27 (2021): 3641-3648.
- Aparicio, Thomas, Magali Svrcek, Julie Henriques and Pauline Afchain, et al. "Panel gene profiling of small bowel adenocarcinoma: Results from the NADEGE prospective cohort." Int J Cancer 148 (2021): 1731-1742.

How to cite this article: Muhammad, Yasin. "Advanced Small Bowel Adenocarcinoma." Clin Med Case Rep 6 (2022): 197.

*Address for Correspondence: Yasin Muhammad, Division of Adolescent and School Health, Centers for Disease Control and Prevention, Atlanta, Georgia, USA, E-mail: Muhammady01@yahoo.com

Copyright: © 2022 Muhammad Y. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 01 March, 2022, Manuscript No. cmcr-22-55509; Editor assigned: 03 March, 2022, PreQC No. P-55509; Reviewed: 10 March, 2022, QC No. Q-55509; Revised: 16 March, 2022, Manuscript No. R-55509; Published: 22 March, 2022, DOI: 10.37421/2684-4915.2022.6.197