

Editorial



Journal of Gastric Cancer: Navigating the Future With the KGCA Guidelines and Nationwide Surveys

Ki Bum Park ¹, Han Hong Lee ²

¹Department of Surgery, St. Vincent's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea

²Division of Gastrointestinal Surgery, Department of Surgery, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea

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Correspondence to

Han Hong Lee

Division of Gastrointestinal Surgery,
Department of Surgery, Seoul St. Mary's
Hospital, College of Medicine, The Catholic
University of Korea, 222 Banpo-daero, Seocho-
gu, Seoul 06591, Korea.
Email: painkiller9@catholic.ac.kr

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ORCID iDs

Ki Bum Park

<https://orcid.org/0000-0001-6035-6584>

Han Hong Lee

<https://orcid.org/0000-0002-7541-8490>

Conflict of Interest

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► See the article “Real-World Compliance of Surgical Treatment According to the Korean Gastric Cancer Guideline 2018: Evaluation From the Nationwide Survey Data 2019 in Korea” in volume 23 on page 535.

Gastric cancer guidelines have been established in various countries with evidence levels and recommendation grading tailored to each nation's specific medical context [1]. These guidelines are largely based on evidence gathered through systematic literature reviews, which predominantly rely on data from selected randomized clinical trials (RCTs), which are known to improve patients' survival rates and quality of life [1].

RCTs minimize the risk of bias by randomizing patients into different treatment arms, setting clear inclusion and exclusion criteria, and meticulously tracking patient outcomes through follow-up assessments. Through this process, RCTs validate treatment efficacy and, for this reason, remain robust tools for advancing scientific knowledge. However, the results of RCTs conducted with selected participants under ideal circumstances are not guaranteed to reveal the same effectiveness as that observed in routine practice. Alternatively, population-based observational studies can be used to evaluate the actual effectiveness of treatment in routine clinical settings. These studies can be used for the external validation of the results of RCTs [2,3].

Likewise, external validation of treatment guidelines, mainly based on the results of RCTs, is essential because it is necessary to investigate whether patients' treatment outcomes improve when the guidelines are applied. Previous studies have consistently revealed significantly lower survival rates among patients with various cancers who do not adhere to these guidelines [4,5]. Similarly, in gastric cancer, studies investigating compliance with the National Comprehensive Cancer Network (NCCN) guidelines have reported reduced survival rates among non-adherent patients [6,7]. However, in Eastern countries, no studies have yet examined guideline compliance itself, or assessed the effectiveness of compliance.

The present issue of the *Journal of Gastric Cancer* published the first study on compliance with gastric cancer treatment guidelines in Eastern countries [8]. This study examined the real-world compliance with surgical treatment in line with the 2018 Korean Gastric Cancer Treatment Guidelines [9]. Compliance was assessed using data from the 2019 national survey for surgically treated gastric cancer [10]. This study had two key findings. First, overall compliance with the guidelines exceeded 80% across all facets of the nationwide survey data. Compared with the reported compliance rates of 32%–41.8% for the NCCN guidelines, this is

a notably high level of compliance [6,7]. Second, the lack of a significant difference in overall compliance based on regional data implies that gastric cancer treatment in Korea is well-standardized nationwide. According to a 2020 study on primary gastric cancer, Korea ranks third in terms of incidence, but has the lowest mortality rate among 185 countries [11]. While this study did not analyze survival rates based on compliance, it is plausible to interpret this phenomenon as being due to the excellence of the guidelines and the high level of guideline compliance compared with other countries [12].

The guidelines and nationwide survey employed in this study were developed by the Korean Gastric Cancer Association (KGCA) and disseminated through the *Journal of Gastric Cancer*. The KGCA has developed gastric cancer treatments guidelines since 2004, offering comprehensive guidance on key clinical questions. The most recent guidelines (Korean Practice Guidelines for Gastric Cancer 2022) will be released in 2023 and incorporate insights from Korean RCTs [13]. Furthermore, the KGCA has conducted nationwide surveys to investigate the clinicopathological features of gastric cancer and trends in surgical treatment every 5 years since 1995 [10]. The latest survey conducted in 2019, included 13,553 patients who underwent gastrectomy out of 14,076 surveyed. This nationwide survey conducted by the KGCA likely encompassed the majority of patients who underwent gastric cancer surgery in 2019 compared to 13,597 gastrectomies documented by the Health Insurance Review and Assessment Service [10].

The *Journal of Gastric Cancer* is dedicated to exploring cutting-edge gastric cancer treatments. As mentioned previously, this study evaluated the practical effectiveness and excellence of gastric cancer treatment in Korea using evidence-based guidelines and high-quality real-world data. This endeavor also reflects the aims and scope of the *Journal of Gastric Cancer* in its pursuit of the forefront of gastric cancer treatment. Gastric cancer treatment guidelines have recently been revised and will continue to be regularly revised based on new evidence. The next nationwide survey will be conducted with more accurate and diverse items. In tandem with these enhancements and subsequent compliance analysis, KGCA and the *Journal of Gastric Cancer* have taken the lead toward unraveling the truth about gastric cancer treatment.

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