

# The first step, but extra effort for better nationwide database

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Provenance: This is a Guest Editorial commissioned by Section Editor Rulin Miao, MD [Key laboratory of Carcinogenesis and Translational Research (Ministry of education/Beijing), Gastrointestinal Tumor Center, Peking University Cancer Hospital & Institute, Beijing, China].

Comment on: The Korean Gastric Cancer Cohort Study: Study Protocol and Brief Results of a Large-Scale Prospective Cohort Study. *J Gastric Cancer* 2016;16:182-90.

Received: 10 April 2017; Accepted: 17 April 2017; Published: 29 April 2017.

doi: 10.21037/tgh.2017.04.09

View this article at: <http://dx.doi.org/10.21037/tgh.2017.04.09>

In this issue of the *Journal of Gastric Cancer (JGC)*, Eom *et al.* introduced the large-scale prospective cohort study in gastric cancer in Korea (1). This study was initiated in 2010 by the Ministry of Health and Welfare of the Republic of Korea to establish a large-scale database of Korean patients with gastric cancer. A total of 4,963 patients were recruited from fourteen hospitals, including National Cancer Center, nine Regional Cancer Centers located in each province and four high-volume hospitals. All data were collected prospectively by trained coordinators using the electronic case report form (eCRF) and the internet-based eVelos system.

This study included not only data regarding clinical outcomes but also detailed information regarding lifestyle and ongoing changes in quality of life (QoL) of patients with gastric cancer. Therefore, it would be one of the largest studies to figure out the current status of the management of gastric cancer in Korea.

Since the late 1990s, the number of cancer survivor has increased continuously. So quality of life and function preserving surgery have become more important issues than before. In Korea, there have been a few reports regarding the assessment of QoL and nutritional status (2,3). Through this cohort study, more comprehensive data, not only data regarding clinical factors related to gastric cancer but also a detailed information regarding lifestyle and QoL of both gastric cancer patients and caregivers, will be available. If the data collection, monitoring and management is perfect, the comparison of QoL of various type of surgery, especially function preserving surgery will be possible. Also the oncologic safety should be verified in the future.

Another interesting point from this issue, is the inclusion of endoscopic therapy or palliative chemotherapy cases. Even though the proportion is small, prospective and detailed information from patients and caregivers will give much more benefit for patients, physicians, and government officials.

Recently, nation-wide survey was published on *JGC* in 2016 (4). A total of 69 institutions participated in and data on 15,613 patients who underwent a surgery in 2014 were collected. According to this survey, there have been several changes since 1999, in which the first survey was launched. Because of increasing lifespan of Koreans, the number of elderly patients has increased subsequently. Interestingly, the total proportion of minimally invasive approach exceeded the proportion of open approach in 2014, also the type of approach has changed from laparoscopy-assisted surgery to totally laparoscopic approach and the method of anastomosis has advanced from extracorporeal to intracorporeal anastomosis. However this national survey is not a prospective cohort study and it included the surgical cases only.

In fact, lots of gastric cancer patients currently undergo endoscopic mucosal resection or endoscopic submucosal dissection (EMR/ESD) (2,5). But in the nationwide survey, those patients who underwent EMR/ESD were excluded. So even-though the proportion of included cases were not high in this cohort, more comprehensive comparison between EMR/ESD and surgery will be possible in terms of clinical outcomes, oncologic safety and quality of life.

Unfortunately, as the author mentioned, much data

regarding baseline clinical characteristics were missing for a considerable number of patients. This will weaken the representativeness of this database. So author should seek the reasons thoroughly. And more strict and intensive data management and collection should be proceeded for future analysis. We have to, of course, consider further analysis for the reason for missing data such as any inconvenience at every stage of the process, from obtaining information from patients to entering data using eCRF and eVelos system. Also we should find the way to reduce the missing data. The Online Korean Breast Cancer Registration Program (6) or the Japanese Gastric Cancer Association nationwide registry (7) are the good resources we can review. Also for developing nation-wide database, more clinician and various experts including gastroenterologists, oncologists, clinical epidemiologist and database manager, should participate in the future project. If this database are carefully updated, it will provide comprehensive information on gastric cancer for patients and physicians and help to establish an effective cancer management system for governments as well.

In conclusion, a large-scale database of Korean patients with gastric cancer was established. We want this study to be one of the cornerstones of Korean prospective cohort studies of gastric cancer after careful updating of database. Also we are sure that more following studies, which is related to the QoL of gastric cancer patients or oncologic outcomes will be possible through this comprehensive database.

### Acknowledgements

None.

doi: 10.21037/tgh.2017.04.09

**Cite this article as:** Shin HJ, Han SU. The first step, but extra effort for better nationwide database. *Transl Gastroenterol Hepatol* 2017;2:37.

### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

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