

胃癌的精準預防：從大數據研究出發

Precision prevention of gastric cancer research for big data

李騰裕

台中榮民總醫院胃腸肝膽科

Gastric cancer is the fifth most common cancer and the third leading cause of cancer mortality worldwide. Unfortunately, most gastric cancer patients are diagnosed at advanced stage with inoperable disease, but only detection of early-stage cancer can improve outcomes because of poor treatment response in advanced gastric cancer. However, early diagnosis in gastric cancer remains a challenge in most countries because of high cost of regular endoscopic surveillance or patients' reluctance to undergo endoscopy. In addition, the results of cost-effectiveness analyses for endoscopic surveillance are conflicting, and clinical guidelines regarding surveillance intervals for high-risk patients have not yet been established. It may be a difficult task for physicians to evaluate cancer risk and communicate with patients for endoscopic surveillance in clinical practice. Several risk factors are related to the development of gastric cancer. For example, peptic ulcer diseases share similar etiologies with gastric cancer, such as *Helicobacter pylori* infection and chronic inflammation. Eradicating *H pylori* reduces risks of peptic ulcer diseases and decreases gastric cancer risk as well. However, routine surveillance endoscopy not only increases procedure-related risks and consumes medical resources but also increases patient anxiety. Appropriate risk stratification to select those with high risk of gastric cancer for surveillance endoscopy and to facilitate risk communication between physicians and patients is a more justified measure. Using the big data from the database of the hospital or of the National Health Insurance, we can evaluate the gastric cancer risk and improve the gastric cancer surveillance according to individual risk factors, such as age, sex, peptic ulcer sites, peptic ulcer complications, *Helicobacter pylori* eradication, nonsteroidal anti-inflammatory drug use, surveillance endoscopy, and intestinal metaplasia. In addition, based on the investigations on the risk factors of gastric cancer, the prevention of gastric cancer could be also improved by aggressively controlling the risk factors. In this meeting, the experience and the prospect of big data research will be shared.