

# Adenoma Detection Rate in Patients Younger Than 50 Years of Age: Relationship of the Adenoma Detection Rate to Interval Cancer

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The incidence of colorectal cancer in Korea has been increasing rapidly, and worldwide age-standardized rate of colorectal cancer per 100,000 population was the highest in the world in 2012 [1]. Thus, now is the time to make an effort to prevent colorectal cancer nationwide. Colonoscopy is the gold standard for primary or follow-up testing to detect colorectal cancer, and the early detection and removal of a precancerous adenoma by using colonoscopy is well known to reduce the risk of colorectal-cancer-related death [2, 3]. The authors of "Distribution of the Colonoscopic Adenoma Detection Rate According to Age: Is Recommending Colonoscopy Screening for Koreans Over the Age of 50 Safe?" cautiously suggest an earlier first-time colonoscopy based on the higher adenoma detection rate for males in their 40's [4].

An inverse relation between the adenoma detection rate (ADR) and the risk of interval cancer has been shown in large-scale studies [5, 6]. Corley et al. [6] compared interval cancer risks among ADRs. According to their report, for patients with an ADR higher than 33.5%, as compared with patients with an ADR lower than 19.05%, the risk of receiving a diagnosis of fatal interval colorectal cancer was reduced by 62%. In their report, each 1% increase in the ADR was associated with a 5% decrease in the risk of a fatal interval colorectal cancer. Therefore, an ADR rate higher than 30% needs to be the focus in terms of pre-

venting fatal interval cancer.

Adenoma detection by colonoscopy depends on various factors concerning the patient, the endoscopist, and the procedure. Bae et al. [4] showed an overall detection rate of 35.4%, which is similar to or a little bit higher than the values published in other reports in Korea [7, 8]. The reason for the higher ADR is not clear. The higher ADR might be due to an actual increase in adenoma occurrence because colonoscopy is now being performed more and physicians have become more experienced. In that report, the ADR of males in their 40's is noteworthy. It is similar to the overall ADR for patients in their 50's. Therefore, the authors' suggestion appears reasonable, especially in circumstances where the rate of young-age colorectal cancer (age lower than 50 years) is increasing [9]. However, before any discussion of early first-time colonoscopy, whether or not this high ADR rate in younger patients is an institution-specific finding needs to be considered. The ADR by age needs to be determined based on a large-scale database review or a prospective evaluation, with patient- and physician-specific factors considered.

## CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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