Histopathologic study from a colorectal cancer screening in Chile: results from the first 2 years of an international collaboration between Chile and Japan.

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Abstract

A national colorectal cancer (CRC) screening program began in Chile in 2012, which is an international collaboration between Japan and Chile and is based on a standardized protocol supported by Tokyo Medical and Dental University. We describe the results from the first 2 years of screening at one public hospital in Punta Arenas, Chile. Of 4124 asymptomatic individuals aged between 50 and 75 years, 485 participants with immunological fecal occult blood test values of at least 100 ng/ml and/or those with family histories of CRC underwent colonoscopies. Lesions were found in 291 participants, and 642 histologic samples were obtained. Chilean pathologists made the initial histologic diagnoses, and a Japanese pathologist reviewed the histologic slides and analyzed the results. Of the 291 participants with lesions, 60 (20.6%) were diagnosed with adenocarcinomas, of which 50 (83.3%) were early-phase adenocarcinomas (pTis or pT1), and 163 (56.0%) were diagnosed with conventional adenomas, of which 96 (58.9%) were high-risk adenomas. The cancer prevalence within the screened population was 1.5% (60 of 4124). The colonoscopy cancer detection rate was 12.4% (60 of 485). Notably, we detected one flat-depressed (0-IIc) lesion that measured 5 mm and had invaded the submucosa. The findings from this screening program are the first to show the histopathologic distributions of consecutive lesions and the high incidence of CRC in Chile. The high detection rates for high-risk adenomas and cancer support the feasibility of early CRC screening and its potential to reduce the mortality associated with CRC.

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