

GOS test as a new screening test for colorectal tumors

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Abstract

The aim of this prospective clinical study was to evaluate the value of Galactose Oxidase Schiff (GOS) test in rectal mucus specimens taken from the patients admitted to surgical clinic or endoscopy unit. The chemical structure of mucus secreted into the the lumen is changed in colorectal neoplasms. GOS is a test in detecting the sructurally changed mucus and can be used as a screening tool in colorectal cancer. The series was compared of consecutive patients, 66 of them with colorectal polyp and/or cancer and 34 individuals apparently free of colorectal disease served as the control group. The colorectal pathology was determined with the histopathologic evaluation of specimens taken during colonoscopy or operation. Patients were recorded according to their age, sex, history of rectal bleeding,the localization of the lesion in colon and the values of CEA and CA 19-9. The sensitivity and spesificity of the test in detecting polyp and cancer was calculated. Correlation of the GOS test with the age, sex, lesion localisation, tumor differantion, CEA and CA 19-9 levels was evaluated. We find that GOS test can detect colorectal polyps and cancers with 90% sensitivity, 88% spesificity, 93% positive predictive value and 90% accuracy. The positivity of the test has no correlation with age, sex, localisation of lesion, rectal bleeding, tumor differantiation, CEA and CA 19-9 levels. As a result, GOS test is an effective and simple test in screening of colorectal polyps and cancer. With the confirmation of the safety of this test also by other centers and by conclusion of wide-range researchers, we believe that this test can take place in screening program for determination of high risk patients for colonoscopy.