Screening programmes in gastroenterology

Screening (search) programmes aim at early diagnosis of diseases that otherwise remain, at this early stage, unrecognised. Screening programmes are carried out on asymptomatic individuals (with no symptoms of the disease). For defined so-called high-risk groups, these are dispensarisation programmes. For these search programmes, the population to be screened, the interpretation of the tests used and the method of further testing or treatment for a positive test result must be precisely defined. Gastroenterological screening, which includes three basic programmes, can be performed **from a stool sample.**

Ocult bleeding screening

for the search and early diagnosis of colorectal cancers by the Haemoccult test is developed in detail, there is a screening interval, an age range as well as a subsequent colonoscopy examination program in positive evidence of occult bleeding.

Screening for *Helicobacter pylori infection,*

which is a class 1 carcinogen, it is currently possible to perform immunochemical evidence of the *Helicobacter pylori* antigen in faeces.

Screening of gluten enteropathy (celiac sprue),

that may be activated by pregnancy and present an increased risk of gastrointestinal malignancies is possible by detection of secretory IgA antibodies to gliadine or evidence of antibodies to tissue transglutaminase in faeces.

Stool testing is a completely non-invasive approach. However, the issue of this type of test involves a significant risk of pre-analytical error as for most tests a stool sample is taken by the patient and, for example, a sample is extracted in a sampling tube. Also, storage of this primary sample cannot be laboratory controlled. Screening tests must therefore be designed robustly enough.

The development of molecular biology and PCR-type applications in routine diagnostics open up completely new trends in GIT tumor screening as well. The latest screening methods are based on the detection of specific mutations by PCR methods or biochip technology in DNA isolated from a stool sample.

Links

Source

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