

# Colorectal cancer/screening

This article has been translated from WikiSkripta; ready for the **editor's review**.

As with all other malignancies that occur abundantly in the population, in the case of colorectal cancer (KR-CA), there was an effort to create an effective screening within the framework of secondary prevention to **capture the early stages of the disease**. Ideally, precancerous (adenomas). Among the main problems of the still quite high mortality of KR-CA is the fact that in most cases it is only diagnosed at a very advanced stage. KR-CA can already be identified as one of the three malignancies for which nationwide screening is carried out in our country (further for breast cancer and cervical cancer), which effectively reduces the morbidity and mortality of this disease in the population.

## Screening methods

The basic screening methods of KR-CA in our country include:

- **Test of occult bleeding in the stool (TOKS)** - according to four randomized studies, the introduction of TOKS reduced mortality from KR-CA in people aged 50-80 years by 15-33%.<sup>[1]</sup>

 For more information see *Haemoccult*.

- **Primary screening colonoscopy** - also proven to reduce the risk of KR-CA mortality.<sup>[1]</sup>

 For more information see *Colonoscopic examination*.

## Screening procedure

Screening KR-CA is performed and paid for by the insurance company for asymptomatic men and women over the age of 50. However, all high-risk patients with a positive personal or family history are excluded from the screening program, special dispensary programs depending on their risk are developed for these individuals.<sup>[2]</sup>

Individuals in the KR-CA screening are divided into two groups according to age, and the examination procedure differs within these two groups:

### Persons aged 50-54:

Once a year, the patient has a TOKS performed either by a general practitioner or a gynecologist. If the test result is negative (TOKS-), the same test is performed on the patient again after one year. In case of a positive result (TOKS+), the patient is sent to a specialized facility for a screening colonoscopy. If the colonoscopy result is negative, the patient will attend another screening examination in up to 10 years, if it is positive, the patient is classified in a high-risk group with a special dispensary program from the point of view of the KR-CA screening.<sup>[2]</sup>

### Persons over 55:

In addition to TOKS, primary screening colonoscopy is also used for these people. The patient has a choice.

- TOKS - in the case of TOKS - either the test is repeated after two years, or a primary screening colonoscopy is performed. In the case of TOKS+, the patient is sent for a screening colonoscopy, as in the previous group.<sup>[2]</sup>
- Primary screening colonoscopy - is an alternative method to TOKS. In the case of a negative result, it is performed again in 10 years, in the case of a positive result, the patient is placed in a high-risk group with a special dispensary program from the point of view of the KR-CA screening.<sup>[2]</sup>

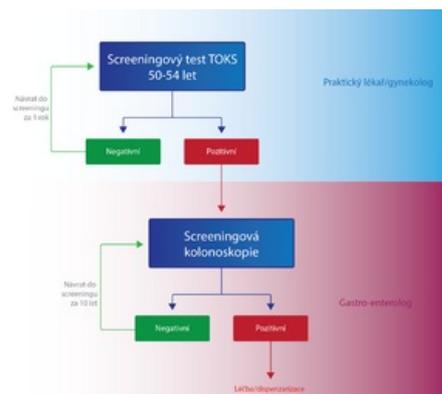
The importance of colonoscopy as part of screening will probably increase with the development of non-invasive virtual colonoscopy methods.<sup>[1]</sup>

Molecular-genetic screening techniques, which have significantly higher sensitivity, are being introduced into practice. They are based on the demonstration of mutations and aberrant methylations typical of adenocarcinoma or advanced adenoma cells<sup>[3]</sup>.

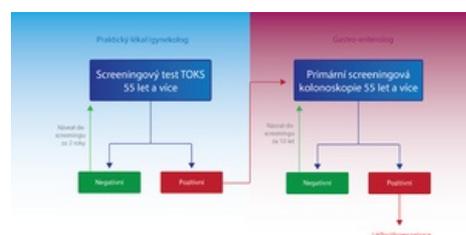
 For more information see *Colon Cancer Screening*.

## Links

## Source



Screening scheme under 55



Over 55 Screening Scheme

- ws:Kolorektální karcinom/screening

## Related Articles

- Colon Cancer Screening

## External links

- Web about colorectal cancer, Institute of Biostatistics and Analysis of Masaryk University (<http://www.kolorektum.cz/index.php?pg=pro-verejnost--kontakty>)

## References

1. CZECH, Richard. *Intern*. 1. edition. Triton, 2010. 855 pp. ISBN 978-80-7387-423-0.
2. DUŠEK, L. *Kolorektum.cz – Colorectal screening program in the Czech Republic. ISSN 1804-0888* [online]. Kolorektum.cz, ©2015. [cit. 2015-11-11]. <<http://www.kolorektum.cz/index.php?pg=pro-odborny--organizace--screeningovy-proces>>.
3. IMPERIALE, Thomas F – RANSOHOFF, David F – ITZKOWITZ, Steven H. Multitarget stool DNA testing for colorectal-cancer screening. *N Engl J Med* [online]. 2014, vol. 371, no. 2, p. 371, Available from <<https://www.ncbi.nlm.nih.gov/pubmed/25006736>>. ISSN 0028-4793 (print), 1533-4406.

## References

- ČEŠKA, Richard. *Intern*. 1. edition. Triton, 2010. 855 pp. ISBN 978-80-7387-423-0.

## Recommended reading

- PETRUŽELKA, Luboš – KONOPÁSEK, Bohuslav. *Clinical Oncology*. 1. edition. Karolinum, 2003. 274 pp. ISBN 80-246-0395-0.
- KRŠKA, Zdeněk – HOSKOVEC, David. *Surgical Oncology*. 1. edition. Grada, 2014. 904 pp. ISBN 978-80-247-4284-7.