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Screening or diagnostic colonoscopy? Secondary prevention of CRC in hands of gastroenterologist

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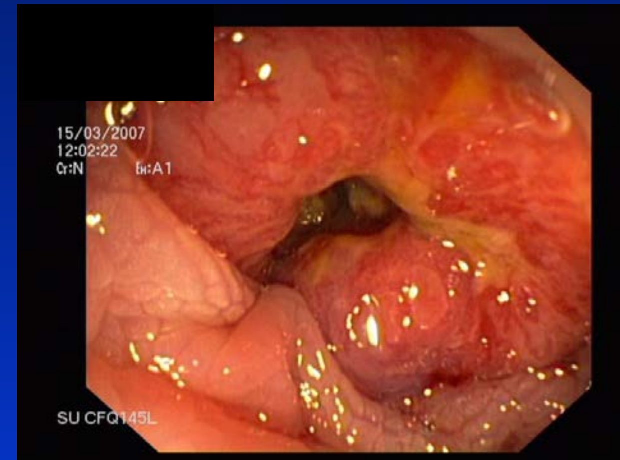
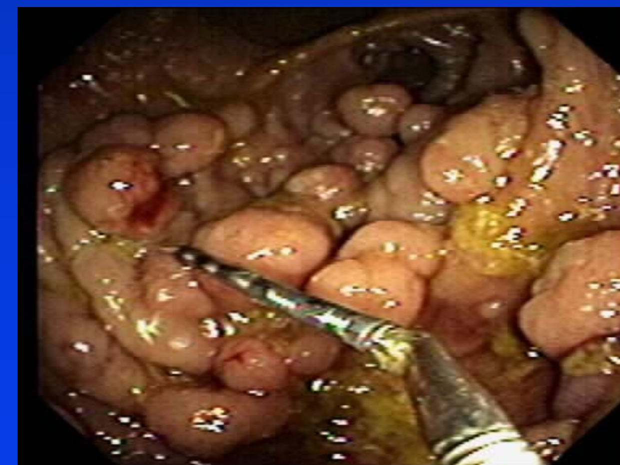
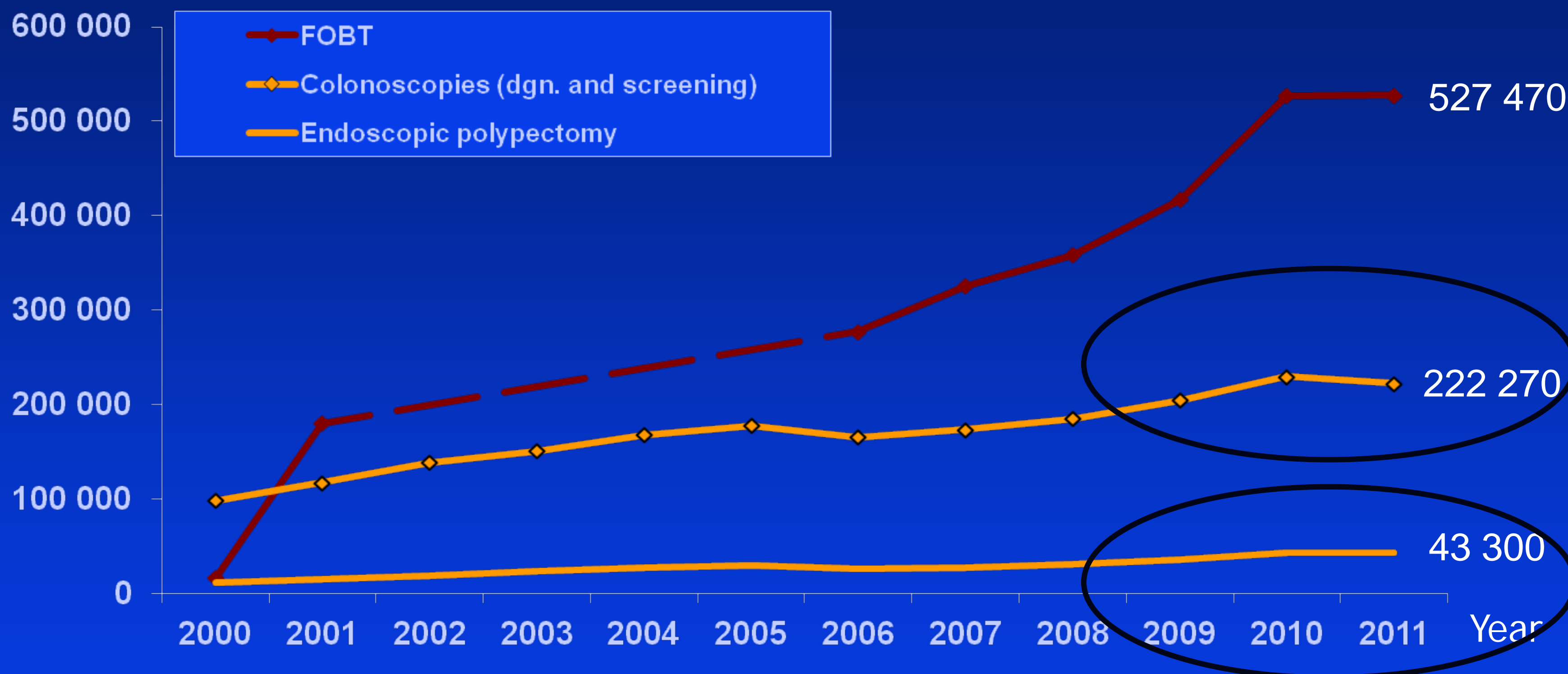
Role of colonoscopy

- Diagnostic
- Therapeutic
- Preventive
  - FOBT+ colonoscopy
  - Screening colonoscopy
    - (age ≥ 55)
  - Follow-up colonoscopy





Timeframe of FOBT and colonoscopy procedures



- number of all colonoscopies is rising continuously
- therapeutic colonoscopies: 20%

Source: National Reference Centre

Basic results of colonoscopy examinations

Year	Patients with colonoscopy	Patients with detected adenoma	Proportion	Patients with detected cancer	Proportion
2006	5,334	1,578	29.6%	335	6.3%
2007	5,679	1,635	28.8%	337	5.9%
2008	7,457	2,367	31.7%	446	6.0%
2009	13,074	4,123	31.5%	623	4.8%
2010	22,727	7,311	32.2%	872	3.8%
2011	24,702	8,294	33.6%	775	3.1%
2012	25,592	8,926	34.9%	805	3.1%
2013*	3,311	1,137	34.3%	84	2.5%
Total	**107,876**	**35,371**	**32.8%**	**4,277**	**4.0%**

- numbers of preventive colonoscopies are rising continuously

* Preliminary results - April 2013

Source: CRC screening database

Preventive colonoscopies

	2008	2011	Difference
Colonoscopies total	185 251	222 270	37 019
Preventive colonoscopies	7 457	25 592	18 127
Ratio	4%	12%	

- preventive colonoscopies increase:
  - 2008 – 2011: 3.5 times
- preventive colonoscopies in 2011:
  - 12% from all colonoscopies

  → colonoscopy indication must be revised

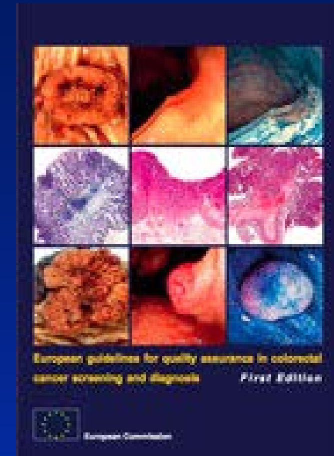
FOBT+ colonoscopies waiting time

Year	Preventive colonoscopies	Average waiting time (months)
2006	5,335	0.85
2007	5,678	0.91
2008	7,457	0.95
2009	11,710	1.04
2010	18,324	1.13
2011	20,131	1.22

- growing number of FOBTs results in increase of FOBT+ colonoscopies waiting times: 6 weeks

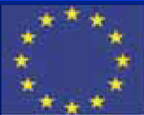
Source: CRC screening database

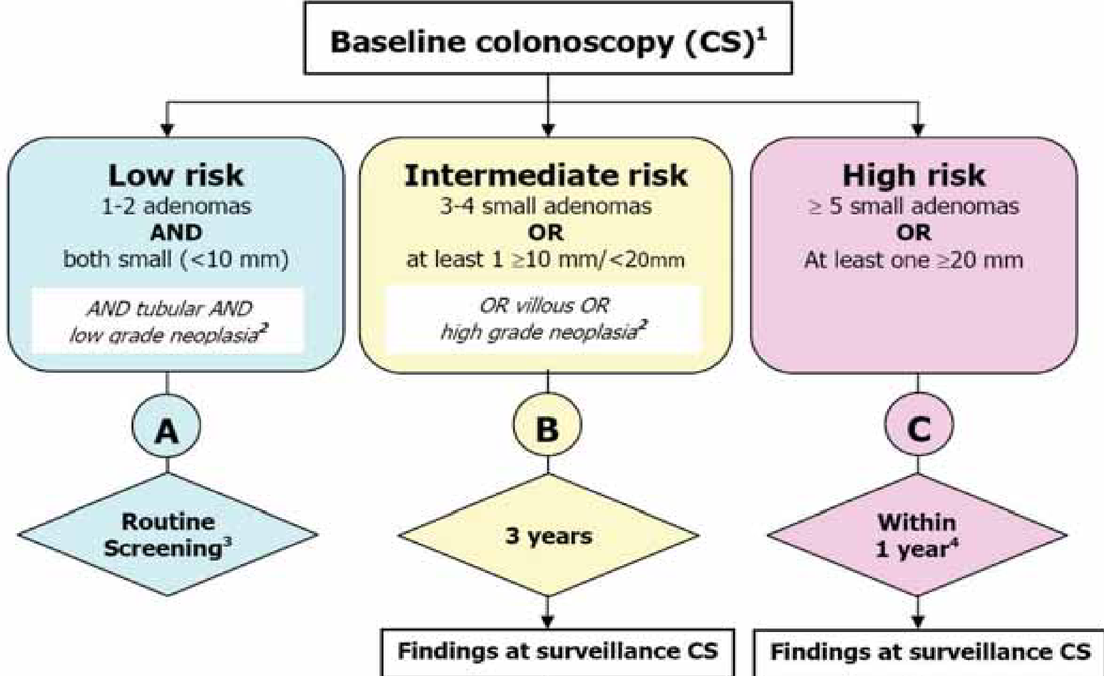
Follow-up colonoscopy



- 20% of all indications in patients ≥ 55 years
- adequate intervals necessary (patient, economy)
- recommendations:
  - US Multi Society Task Force on CRC (USA)
  - European Quality Assurance un CRC Screening and Diagnosis (EU)
- risk groups settings:
  - low risk: 1-2 adenomas < 10mm
  - high risk ≥ 3 adenomas or adenoma ≥ 10mm or advanced histological features (HGD, villous structure)
- follow-up intervals:
  - low risk: 5-10 years (USA), regular screening (EU)
  - high risk: 3 years

Jover R, WEO CRC Screening meeting 2012





Atkin W in European guidelines, 2010

Follow-up intervals (1)

Colonoscopy findings	Follow-up interval
No polyp	10 let
Hyperplastic left-sided polyp	10 let
1-2 tubular adenomas (LGD) < 10mm	5-10 let
3 and more tubular adenomas (LGD)	3 roky
Tubular adenomas ≥ 10mm	3 roky
Villous adenomas (> 25%)	3 roky
Adenomas with HGD	3 roky
Piece meal resection	1 rok
Carcinoma	1 rok
Serrated adenoma – polyposis	1 rok
Serrated adenom – **dysplasia/ ≥10mm**	3 roky
Serrated adenom – no dysplasia/ < 10mm	5 let

Adapted from ASGE guidelines and Jover R, Endoscopy 2012

Follow-up intervals (2)

CRC family history	
1 first degree relative < 50 let 2 firsts degree relatives of any age Both parents involvement Descendant involvement	Screening colonoscopy in age of 40 or 10 years prior the relative illness Follow-up intervals of 3-5 years even if the colonoscopy findings are negative
LYNCH SYNDROM, FAP, AFAP, MYH POLYPOSIS, IBD	
Special follow-up programs	

Adapted from ASGE guidelines and Jover R, Endoscopy 2012

Conclusion

- Adequate colonoscopy indications are absolutely necessary from the point of medical, forensic and economical view
- There is remarkable increase of colonoscopies performed in the Czech Republic
- The follow-up intervals should be kept as recommended