To resect or not?
Is it possible to get the balance right?

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Case – medical background

- 73 year old male (january 2015)
- Personal History:
  - Arterial Hypertension (WHO grade III)
  - Obesity (BMI 34) and hypercholesterolaemia
  - COPD and ex-smoker (stop 5 months, >30 packyears)
  - Coronary Artery Disease
    - August 2014 myocardial infarction with ventricular fibrillation, CPR, pneumonia, respiratory failure
    - August 2014 percutaneous coronary intervention with DES (drug eluting stent) placement.
- Medication: aspirin 100mg/d, clopidogrel 75mg/d (Plavix®), atorvastatin 20mg/d, metoprolol 25mg/d, furosemide 40mg/d, omeprazole 20mg/d, theophylline 300mg bid, allopurinol 100mg/d

Case – presentation

January 2015 + iFOBT (no complaints, GP driven iFOBT)

In what circumstances would you do a colonoscopy at this moment with regard to the dual antiplatelet aggregation regimen?

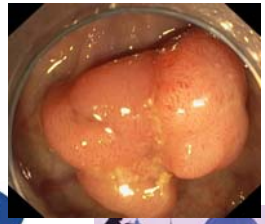
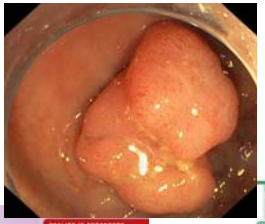
1. Postpone the colonoscopy until august 2015 (presumed stop clopidogrel after DES).
2. Both aspirin and clopidogrel withdrawal (5 days)
3. Clopidogrel withdrawal (5d), maintain aspirin
4. Continue dual APA (aspirin+ , clopidogrel +)

ESGE guidelines. Endoscopy 2011; 43:445-458

Bleeding risk	Endoscopic procedure	Continuation of aspirin?	Continuation of clopidogrel or prasugrel?
Low risk	EGD and colonoscopy +/– biopsy	Yes	Yes
	EUS without FNA	Yes	Yes
	Colonic polypectomy < 1 cm	Yes	No*
	Dilation of digestive stenoses	Yes	No
	EUS-FNA of solid masses	Yes	No
	Digestive stenting	Yes	No
	ERCP with stent placement or papillary balloon dilation without endoscopic sphincterotomy	Yes	Yes
	Argon plasma coagulation	Yes	No†
High risk	EMR, ESD and ampullary resection	No	No
	Endoscopic sphincterotomy	Yes	No
	Endoscopic sphincterotomy + large-balloon papillary dilation	No	No
	Colonic polypectomy > 1 cm	Yes	No*
	EUS-FNA of cystic lesions	No	No
	Percutaneous endoscopic gastrostomy	Yes	n.a.
	Esophageal variceal band ligation	Yes	No

Case – colonoscopy 1/2015

- Continuation of aspirin and clopidogrel
- 8 polyps + flat lesions (≤ 1cm) were removed by snare polypectomy and submucosal lifting (EMR)
- 2 large semipedunculated polyps size (> 2cm) were not resected at this moment (Pit pattern IV)

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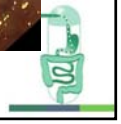

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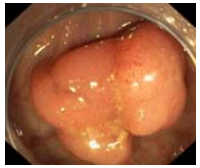
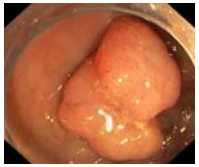
Data for statement 2015 :
- All recent studies have confirmed that overall PPB risk is not increased in patients taking low dose aspirin.
- Recent studies have showed that the risk of postpolypectomy bleeding in patients taking clopidogrel is increased both for overall and delayed bleeding

How to treat the large, semipedunculated (>2 cm) type IV, polyps?

1. Postpone endoscopic polypectomy until august 2015 (presumed stop clopidogrel after DES).
2. Clopidogrel withdrawal (5d), maintain aspirin
3. Continue dual APA (aspirin+ , clopidogrel +)
4. Continue dual APA + close polypectomy defect

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RISK of severe thrombo-embolic event when stopping APA

HIGH: DES < 12 months

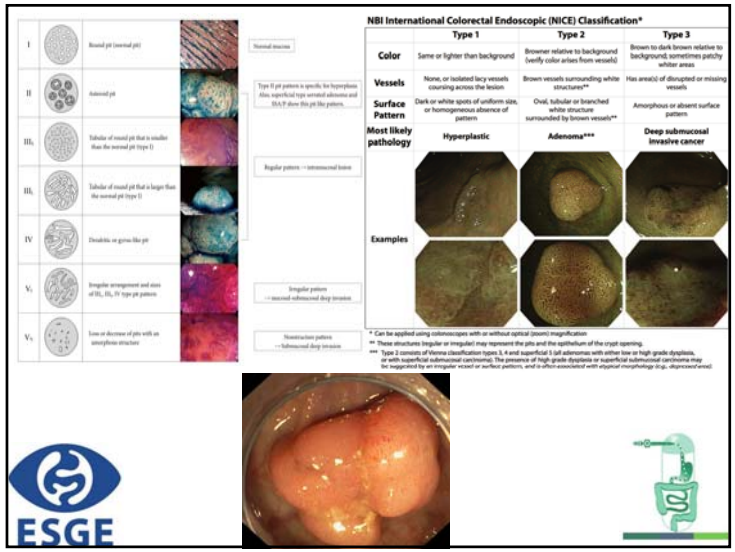
RISK of postpolypectomy bleeding, if not stopping APA

Overall risk (no APA): 1,2%
Post-EMR bleeding: 3-7%

Risk ↑↑ Clopidogrel
> 1 cm polyps

RISK of the lesion

Progression adenoma to invasive cancer is slow


NBI International Colorectal Endoscopic (NICE) Classification*
Type 1
Type 2
Type 3
Color
Vessels
Surface Pattern
Most likely pathology
Hyperplastic
Adenoma***
Deep submucosal invasive cancer
Examples
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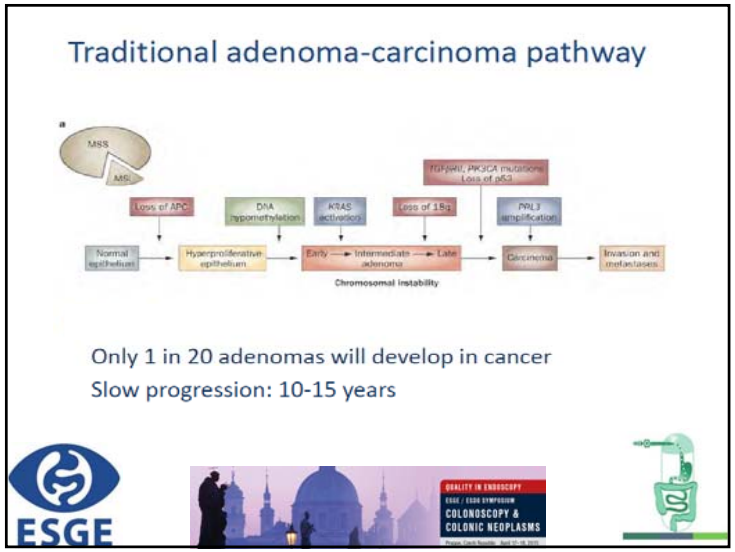
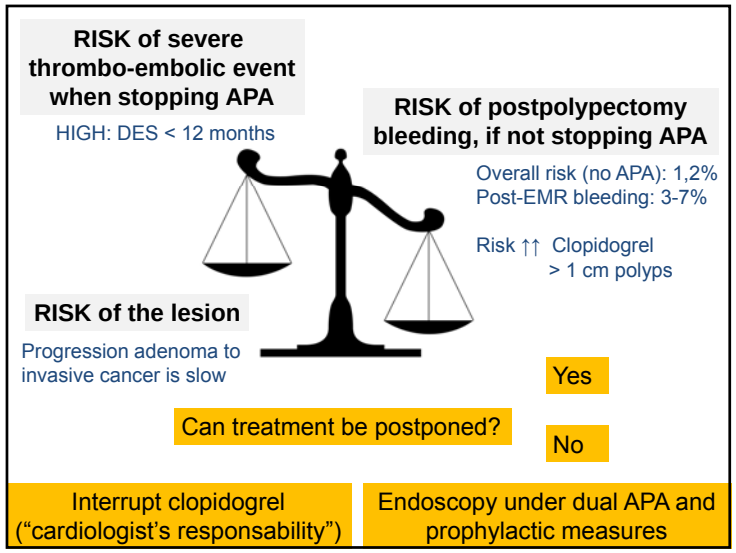

Traditional adenoma-carcinoma pathway
MSS
MSI
Loss of APC
DNA hypomethylation
KRAS activation
Loss of 18q
PIK3 amplification
Normal epithelium
Hyperproliferative epithelium
Early
Intermediate
Late
adenoma
Carcinoma
Invasion and metastases
Chromosomal instability
Only 1 in 20 adenomas will develop in cancer
Slow progression: 10-15 years
ESGE
COLONOSCOPY & COLONIC NEOPLASMS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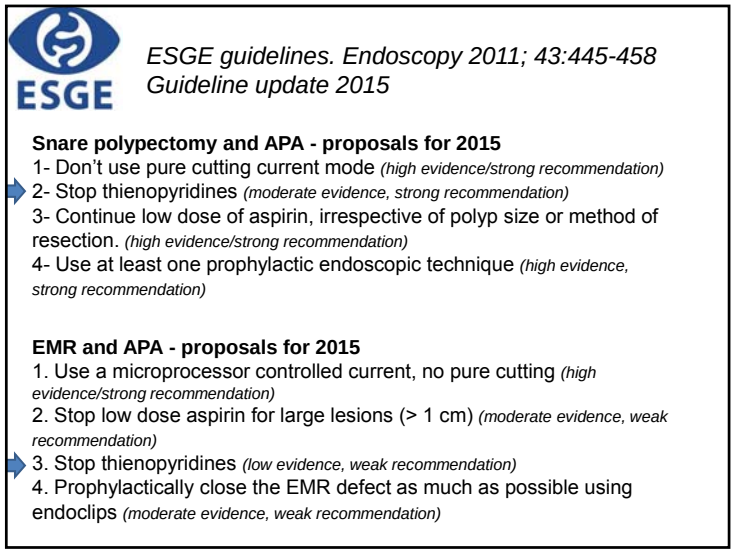
RISK of postpolypectomy bleeding, if not stopping APA
Overall risk (no APA): 1,2%
Post-EMR bleeding: 3-7%
Risk ↑↑ Clopidogrel
> 1 cm polyps
RISK of the lesion
Progression adenoma to invasive cancer is slow
Yes
Can treatment be postponed?
No
Interrupt clopidogrel ("cardiologist's responsability")
Endoscopy under dual APA and prophylactic measures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ESGE guidelines. Endoscopy 2011; 43:445-458
Guideline update 2015
Snare polypectomy and APA - proposals for 2015
1- Don't use pure cutting current mode (high evidence/strong recommendation)
2- Stop thienopyridines (moderate evidence, strong recommendation)
3- Continue low dose of aspirin, irrespective of polyp size or method of resection. (high evidence/strong recommendation)
4- Use at least one prophylactic endoscopic technique (high evidence, strong recommendation)
EMR and APA - proposals for 2015
1. Use a microprocessor controlled current, no pure cutting (high evidence/strong recommendation)
2. Stop low dose aspirin for large lesions (> 1 cm) (moderate evidence, weak recommendation)
3. Stop thienopyridines (low evidence, weak recommendation)
4. Prophylactically close the EMR defect as much as possible using endoclips (moderate evidence, weak recommendation)

Case – endoscopic polypectomy large polyps

- Cardiologist advice “agree for temporary interruption of clopidogrel”

- ASA continued / stop clopidogrel 7 days before
- January 2015: EMR resection of both adenomas
  (submucosal injection of 5 ml of an adrenalin solution 1:20 000)
- Visible vessel after EMR – oozing bleeding