



Joep Bartelsman Paul Drillenburg

(potentiële) belangenverstrengeling	Geen
Voor bijeenkomst mogelijk relevante relaties met bedrijven	Bedrijfsnamen
<ul style="list-style-type: none">• Sponsoring of onderzoeksgeld• Honorarium of andere (financiële) vergoeding• Aandeelhouder• Andere relatie, namelijk ...	<ul style="list-style-type: none">••••

Joep Bartelsman

Paul Drillenburg

- Proctitis/SOA's
- HIV/Anal intraepithelial neoplasia
- Anus carcinoom



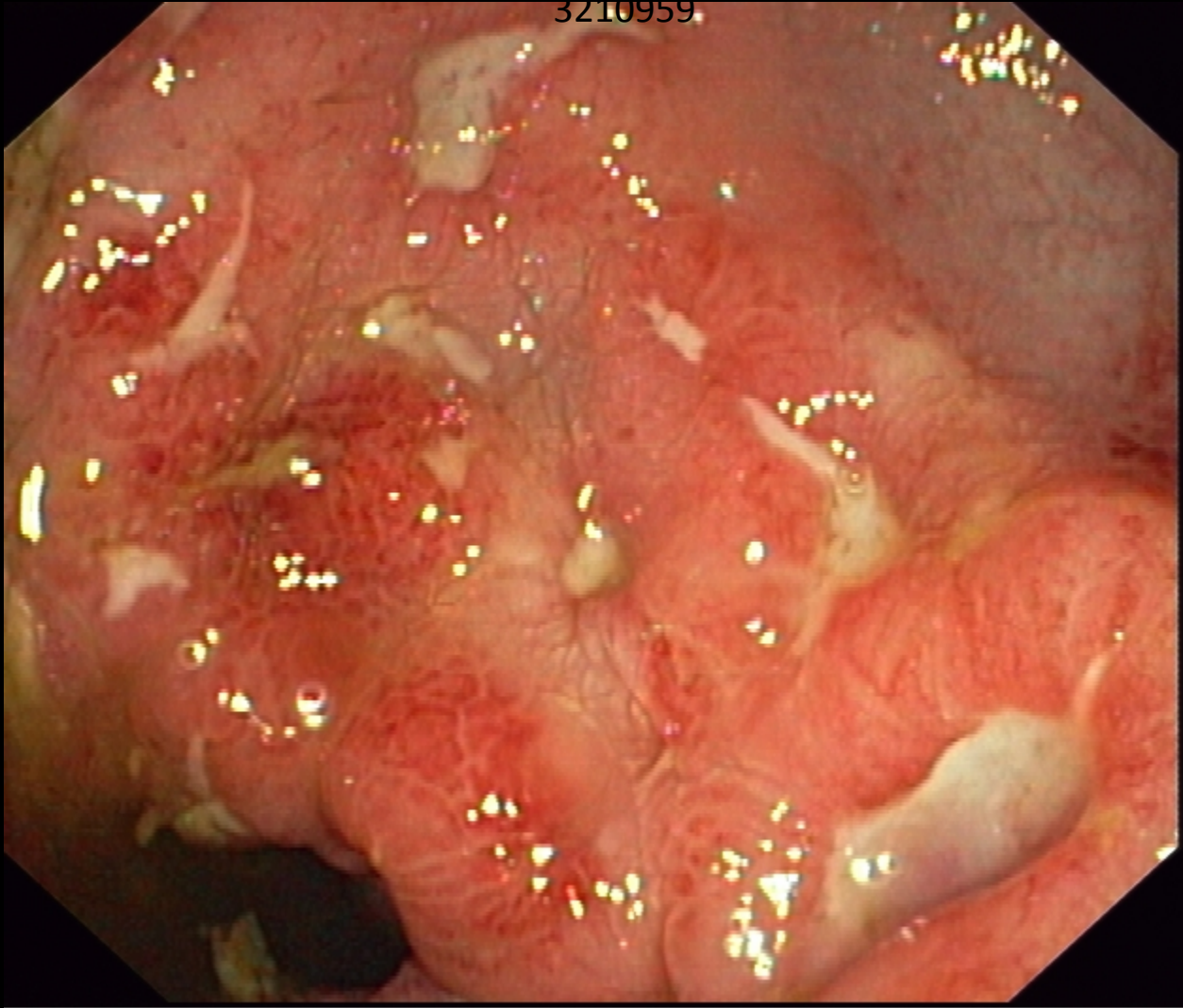
MSM

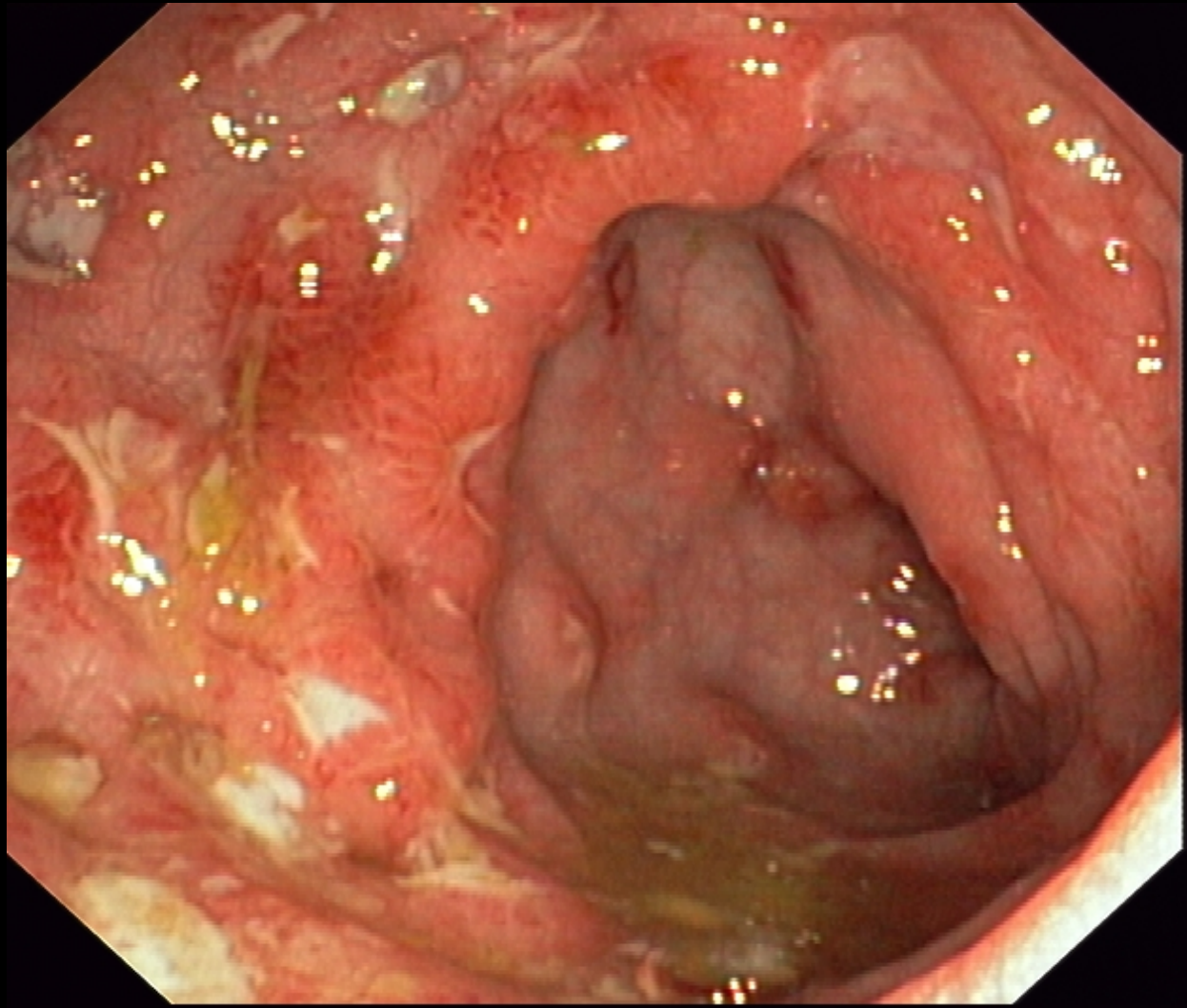
35 –year old man

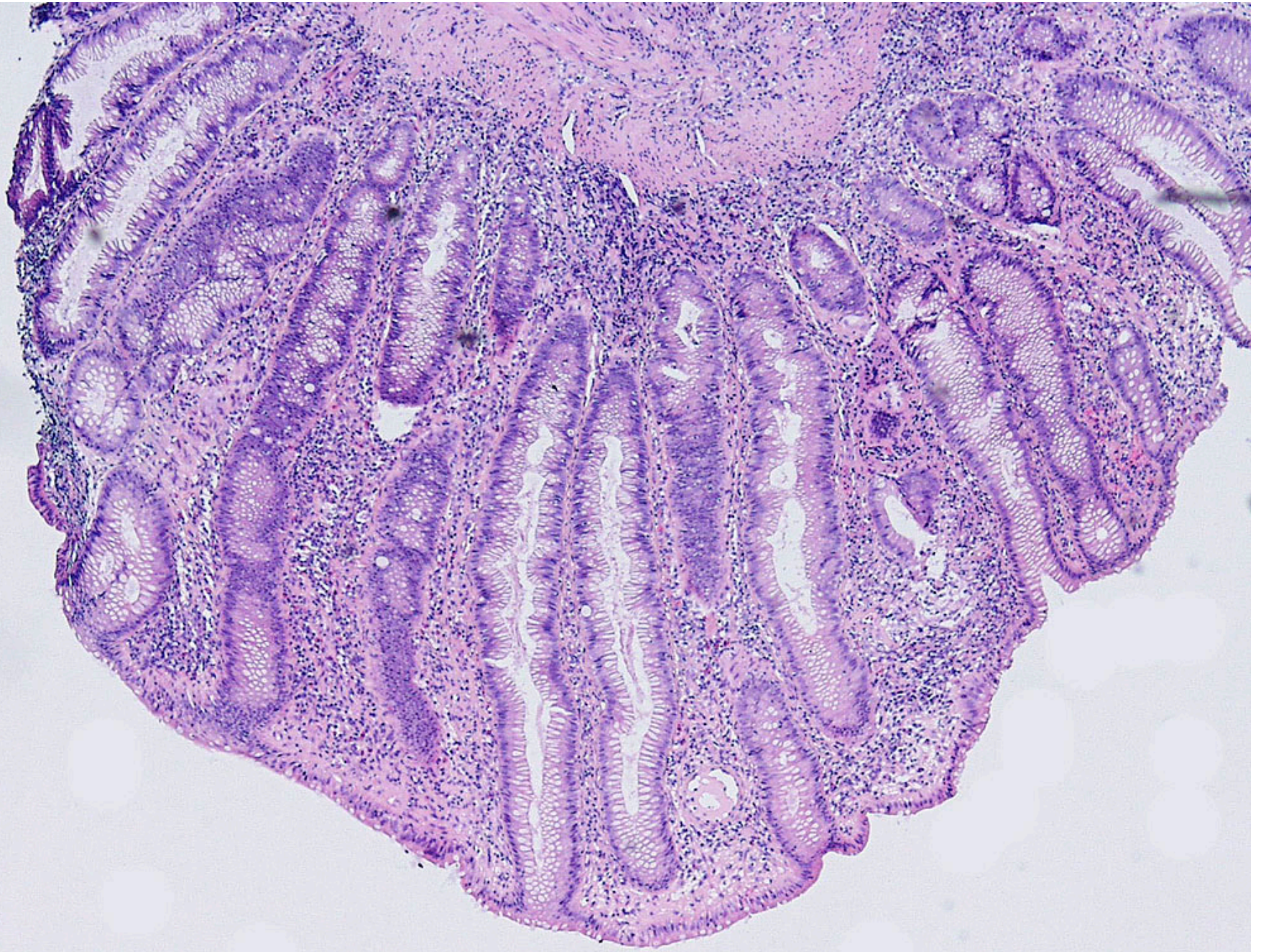
- since two days: pain on defecation
rectal discharge
blood in stools
defecation : 15 x
- since 5 years: HIV-infection: $CD4 > 400.10^6/L$
- recent visit Thailand: amebiasis + giardiasis

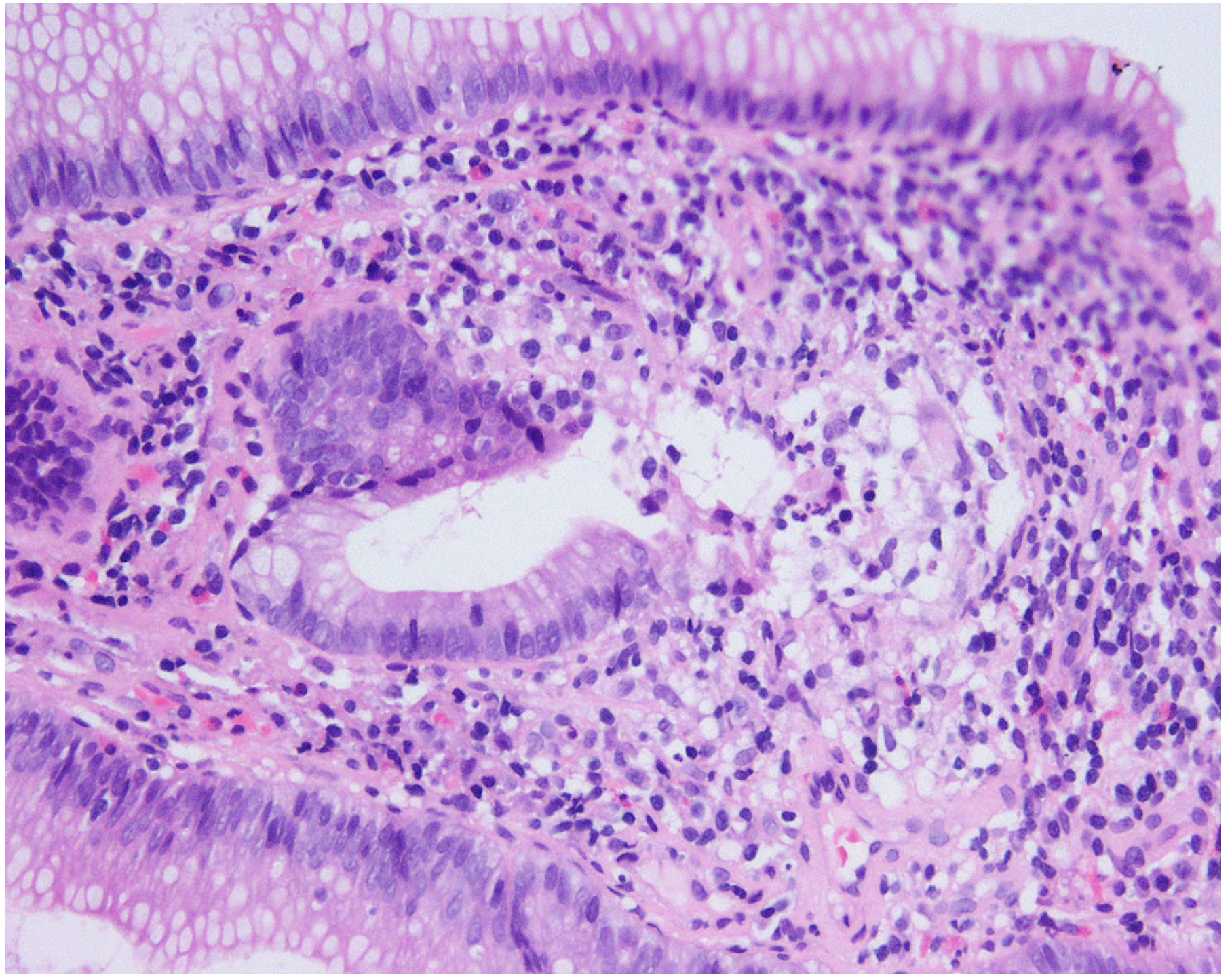


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after treatment



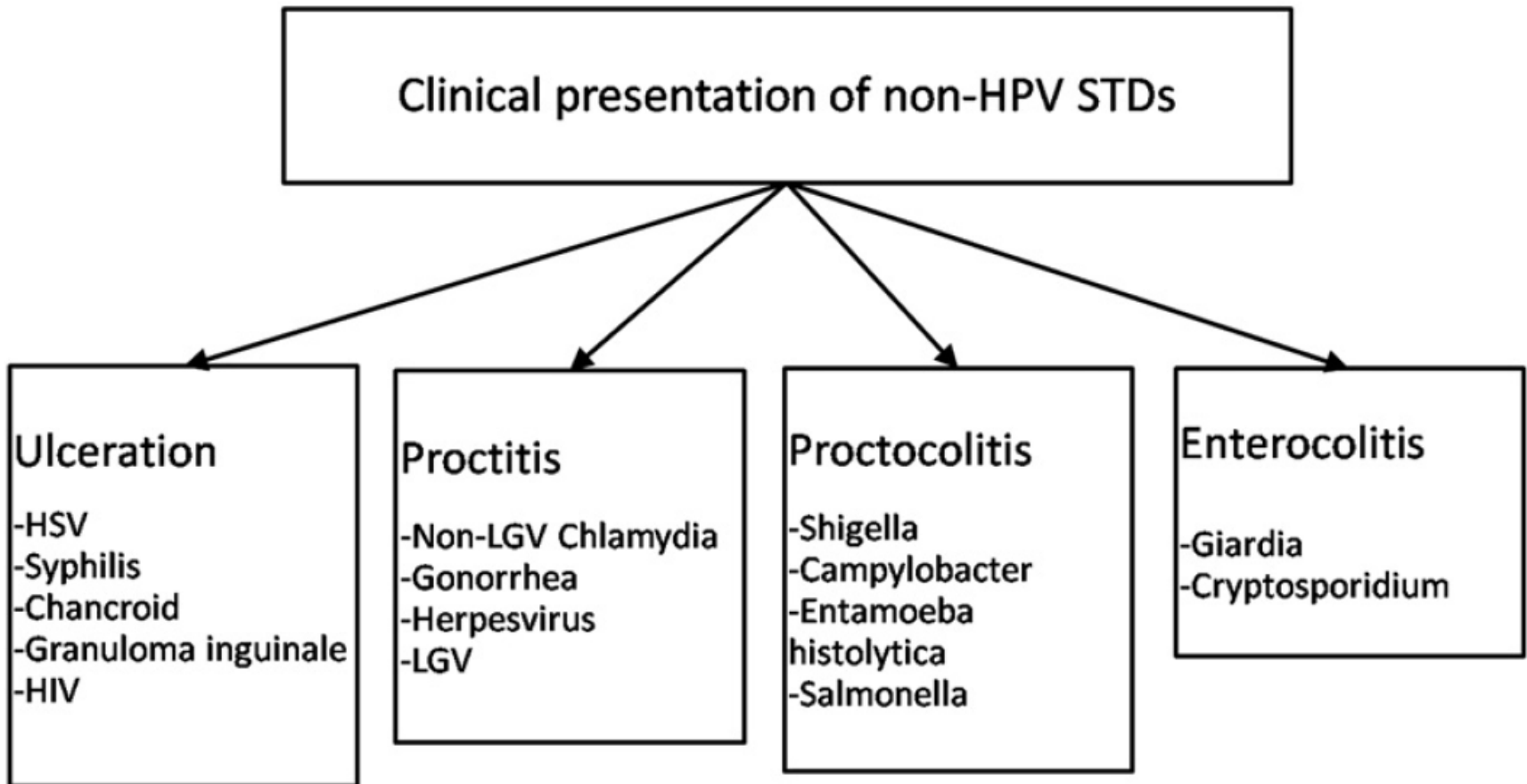


Fig. 1. Common causes of non-HPV sexually transmitted diseases. Refer to www.cdc.gov for an exhaustive review of sexually transmitted diseases.

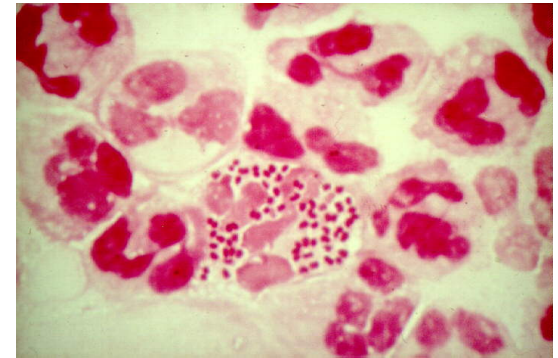
infectious proctitis

STD

<i>N.gonorrhoea</i>	30 %
<i>C.trachomatis</i>	19 %
<i>HSV-2</i>	16 %
<i>T.pallidum</i>	2 %
<i>Co-infection</i>	10 %

PROCTITIS

gonorrhoea

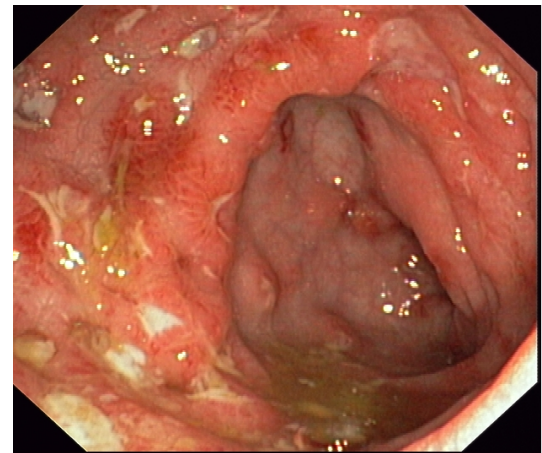
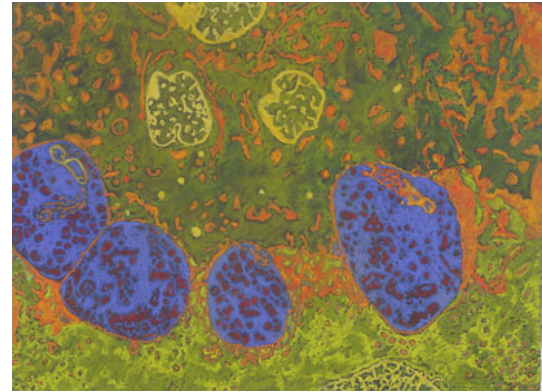


- Incubation time: 5 – 7 days
- Mild complaints: mucopurulent discharge
- Proctoscopy: superficial proctitis, no ulcers
- D: gramstaining / culture
- TH: ceftriaxone 125 mg im. 99% healing

PROCTITIS

C.trachomatis

1. Non-LGV: mild
superficial proctitis
no ulcers
 2. LGV-type: severe complaints
bloodloss
severe proctitis, ulcers
granulomas
- D: serology, culture, PCR
- TH: doxycycline, 2dd 100 mg 7-10 days



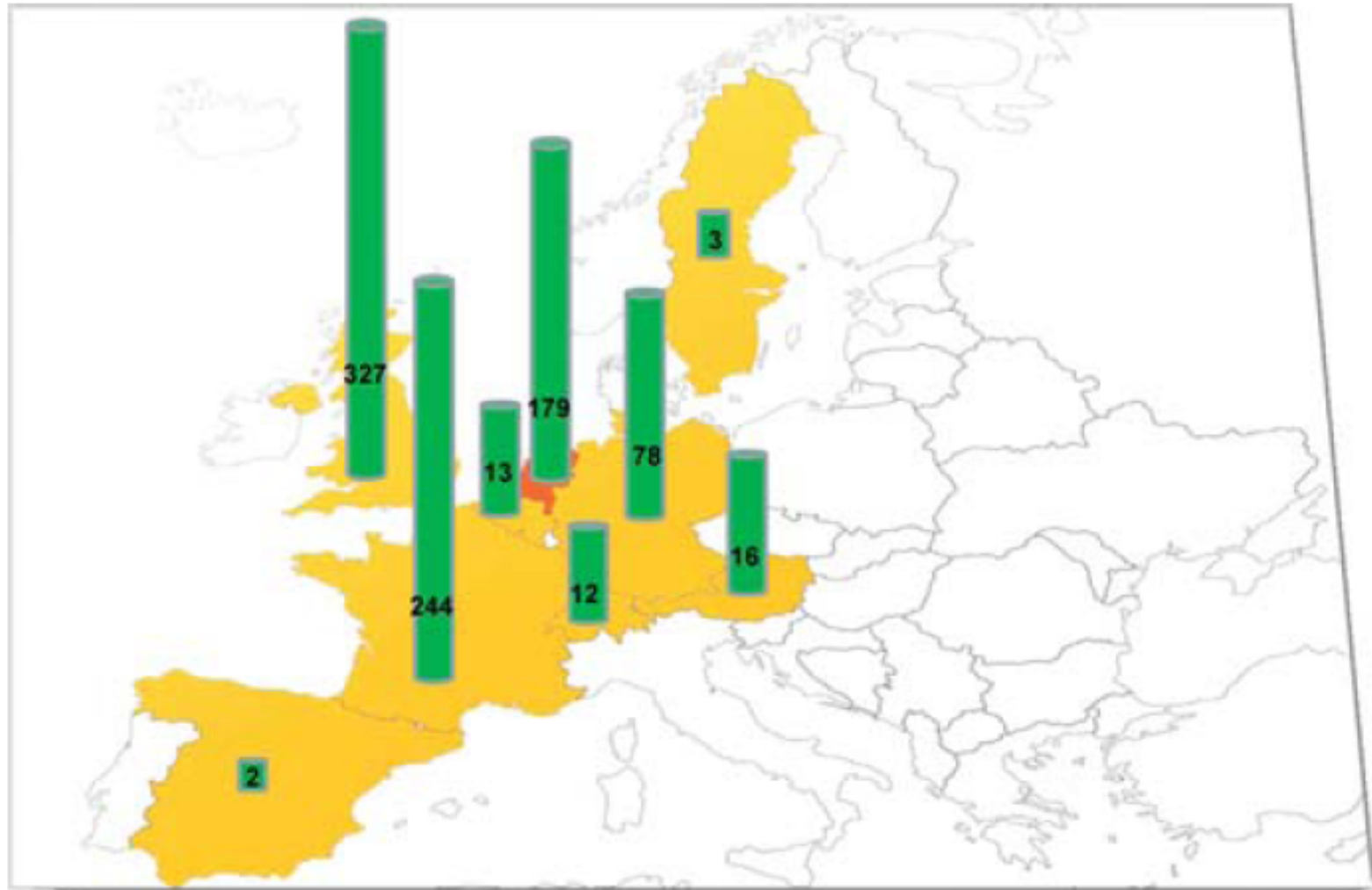


Figure 2: Spread of LGV in Europe. Graphic showing published numbers of patients with LGV in various countries.

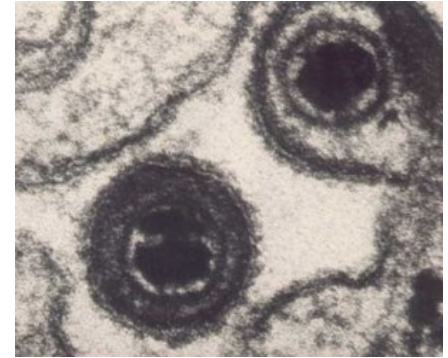
Lymphogranuloma Venereum Proctitis in Men Who Have Sex With Men Is Associated With Anal Enema Use and High-Risk Behavior

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COLETTE SMIT, MD,†|| FRANK DE WOLF, MD, PhD,|| MARIA PRINS, PhD,†§ ROEL A. COUTINHO, MD, PhD,†§¶
AND SERVAAS A. MORRÉ, PhD#**††

TABLE 4. Multivariate Multinomial Logistic Regression Model of 32 Men With LGV Proctitis (LGVP), 16 Men With Gonorrheal Proctitis (GOP), 29 Men With a Non-LGV Chlamydia Proctitis (Non-LGV Chlamydial Proctitis), Compared With 24 Men With a Proctitis of Unknown Etiology (PUE, Reference Group)* (STI Outpatient Clinic Amsterdam, August 2004 to April 2006)

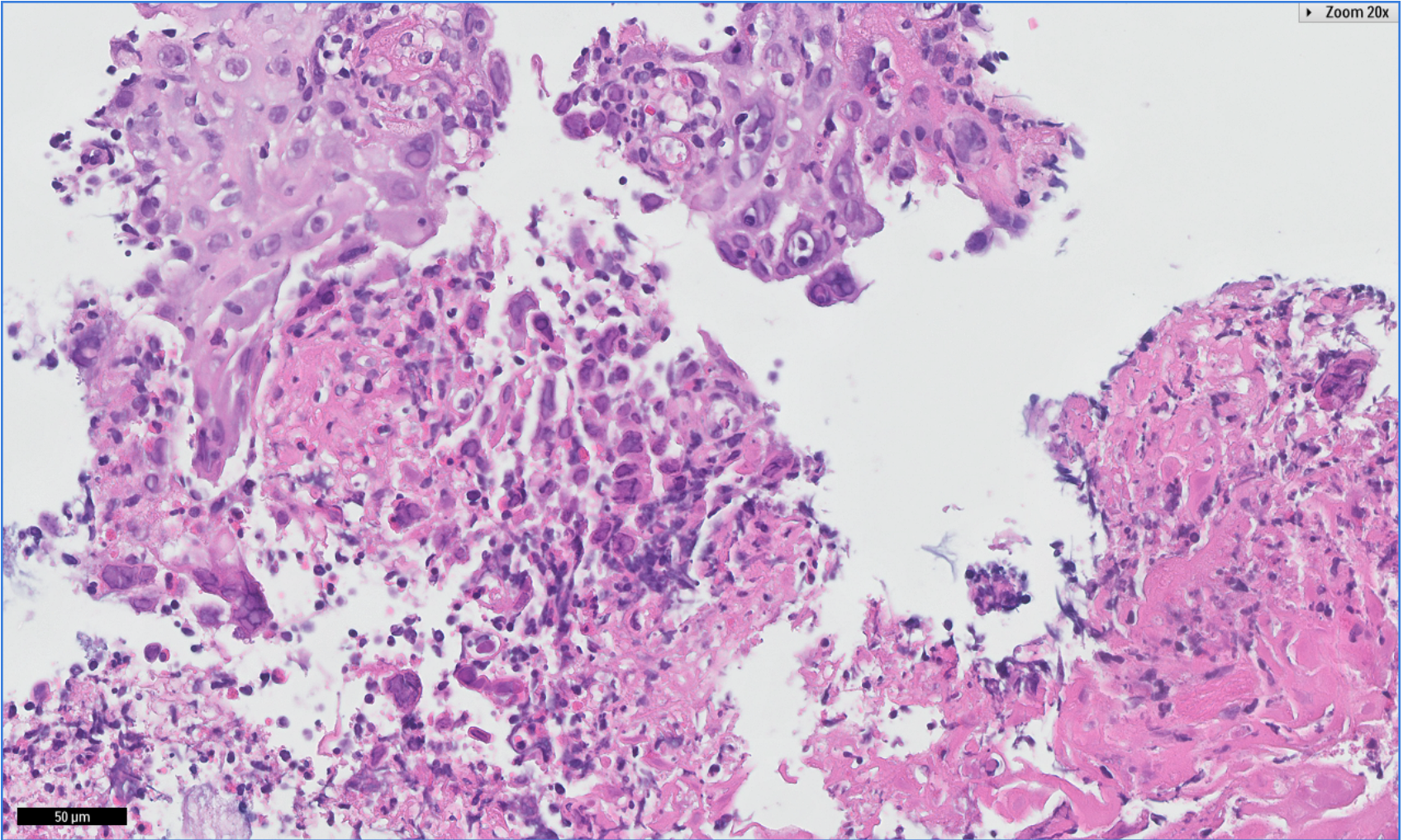
Group	Risk Factor	Odds Ratio (95% CI)	<i>P</i>
CTP	Use of toys	0.3 (0.1–1.5)	0.1
	Use of enemas	8.7 (1.6–46.7)	0.01
	Sex at a sex party	1.6 (0.3–9.8)	0.6
	Sex with HIV-positive partners	0.7 (0.2–2.5)	0.5
GOP	Use of toys	0.4 (0.08–2.5)	0.4
	Use of enemas	3.1 (0.5–20.4)	0.2
	Sex at a sex party	1.0 (0.1–8.2)	1.0
	Sex with HIV-positive partners	1.3 (0.3–5.4)	0.7
LGVP	Use of toys	0.07 (0.01–0.4)	0.004
	Use of enemas	31.1 (5.4–180.3)	0.000
	Sex at a sex party	7.6 (1.2–47.1)	0.03
	Sex with HIV-positive partners	2.8 (0.7–11.3)	0.1

PROCTITIS HSV

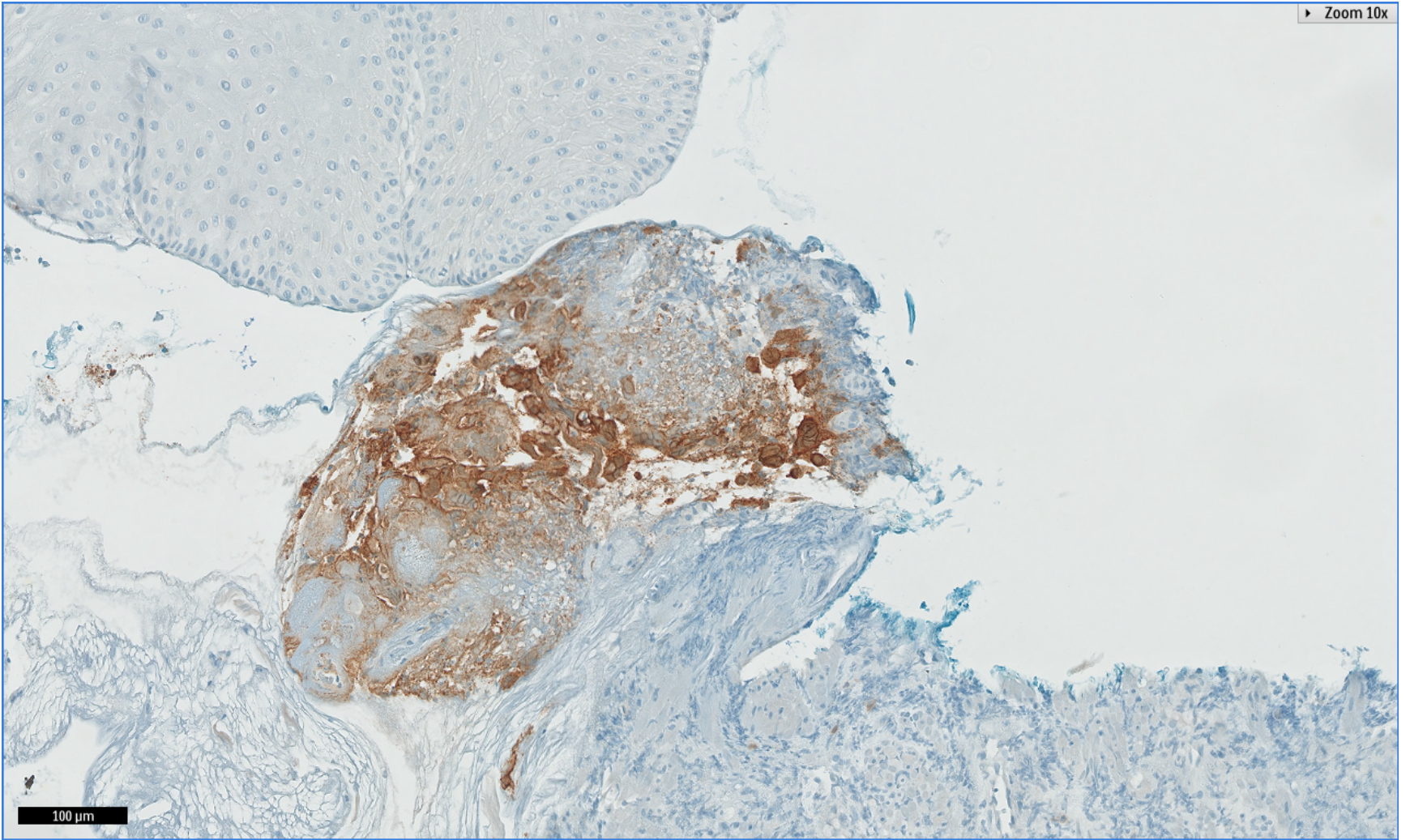


- 70 % HSV 2
 - also perianal disease
 - severe complaints
 - impotence, sacral paresthesias
 - fever
 - perianal and rectal lesions: ulcers
- D: culture, IF staining
- TH: acyclovir 5dd 400 mg - 10 days

► Zoom 20x



50 μ m

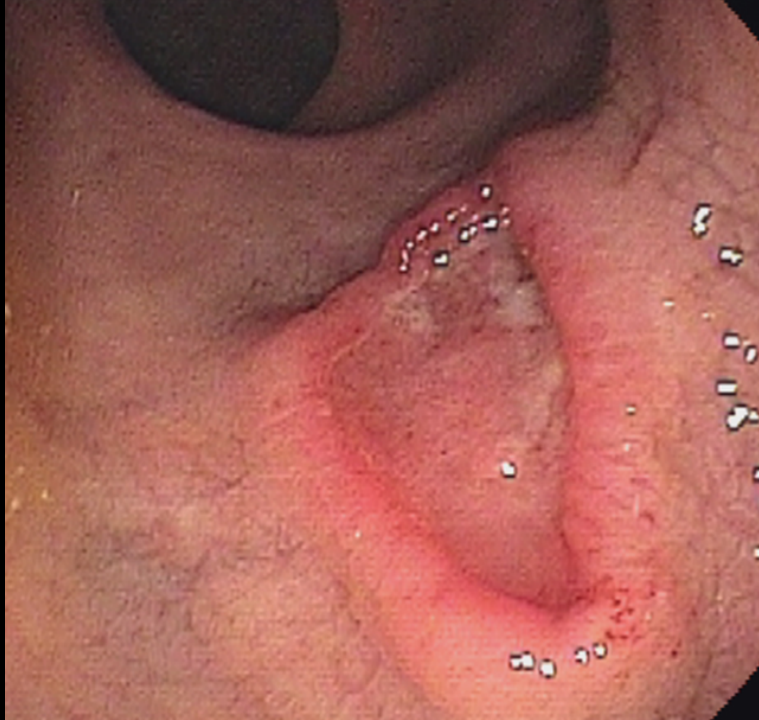


100 µm

PROCTITIS

t.pallidum

1. Syphilis I : 2-6 weken na anale sex
pijnloos, jeuk, bloedverlies
scherp gedemarkeerde ano-
rectale lesie met geïndureerde
randen (lijkt fissuur !)
 2. Syphilis II: rectale massa, condylomata
lata
- D: serologie, biopt (zilverkleuring)
- TH: penicilline: 2,4 Milj.units im



Syphilis I



Condylomata Lata of Secondary Syphilis

Syphilis II

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Davorka Lukas, M.D., Ph.D.

University Hospital
for Infectious Diseases
10 000 Zagreb, Croatia

Table 1 Sexually Transmitted Proctitides: Cause, Diagnosis, and Treatment

Voth, 2007

Cause	Diagnosis	Treatment (First Line)
<i>N. gonorrhoeae</i>	Culture, Thayer-Martin	Cefixime/ceftriaxone
<i>C. trachomatis</i>	LCR/PCR	Azithromycin/ doxycycline
<i>T. pallidum</i>	Darkfield examination	Penicillin G
Herpes simplex	Tzanck preparation	Symptomatic (+/- acyclovir)

LCR, ligase chain reaction; PCR, polymerase chain reaction.

When infectious proctitis is diagnosed

HIV testing is mandatory !

HIV infection

- 1982 - 1996: pre - HAART
- 1996 - 2004: post - HAART:

mortality ↓

infections ↓

KS ↓

NHL ↓

Anus carcinoma ↑

AMC Amsterdam

1982 - 1992

- AIDS patients: 606
- data available: 550

- male homosexuals: 487
- male heterosexuals: 40
- female: 23

AIDS

gastrointestinal disease

- Diarrhea 44 %
- Dysphagia 32 %
- KS 29 %
- Anal disease 18 %
- Hepatobiliary disease 19 %

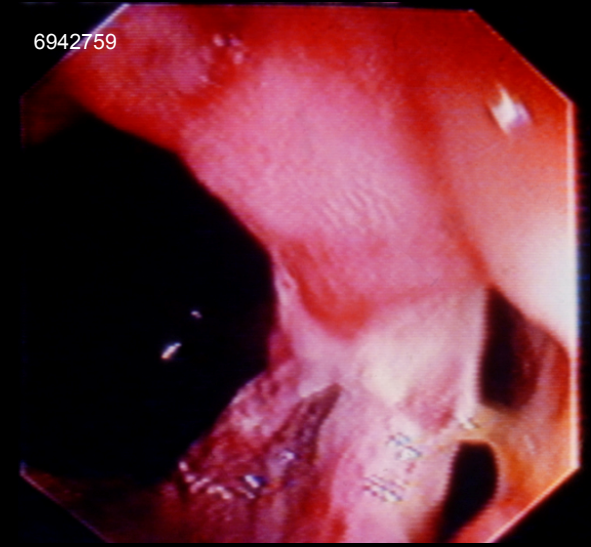
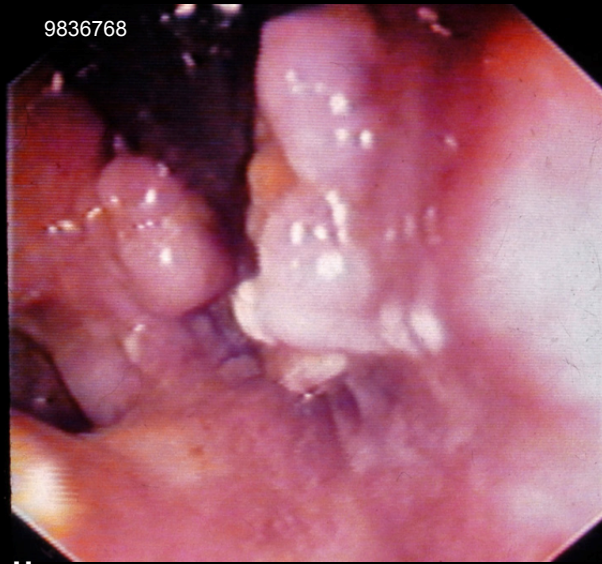
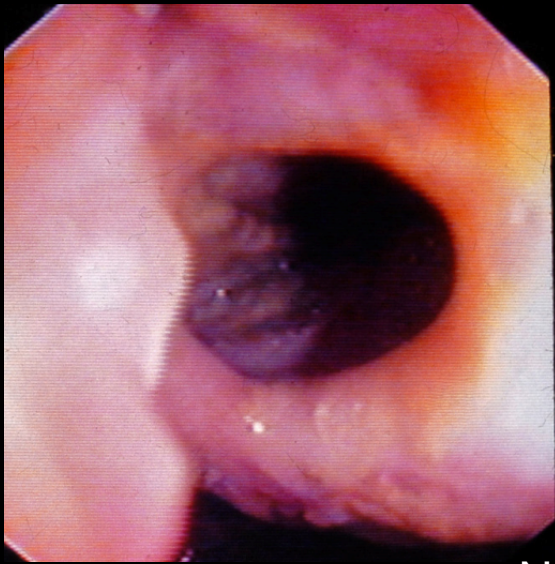
AIDS

dysphagia/odynophagia

Oesophagitis:

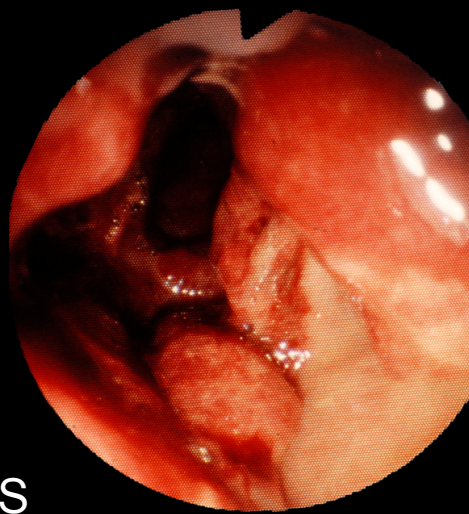
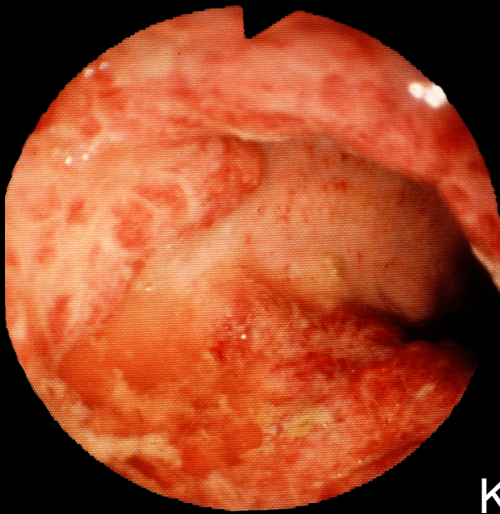
- Candida 50 %
- CMV 25 %
- HSV 10 %
- multiple causes 25 %

Bonacini, 1991

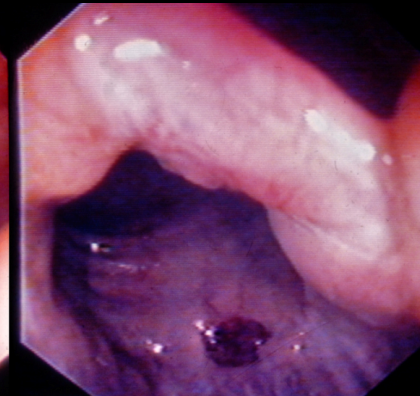
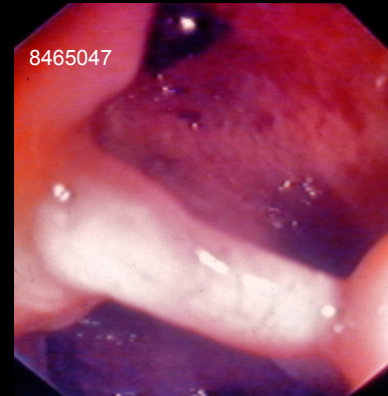


NHL

CMV+HSV-2



KS



HSV

AIDS ANORECTAL DISEASE

HIV HAART-era

- After 1996 impressive decrease HIV-related morbidity and mortality
- HIV has become a chronic disease
- Aging HIV patient
- New causes of morbidity

**ANAL
CANCER**

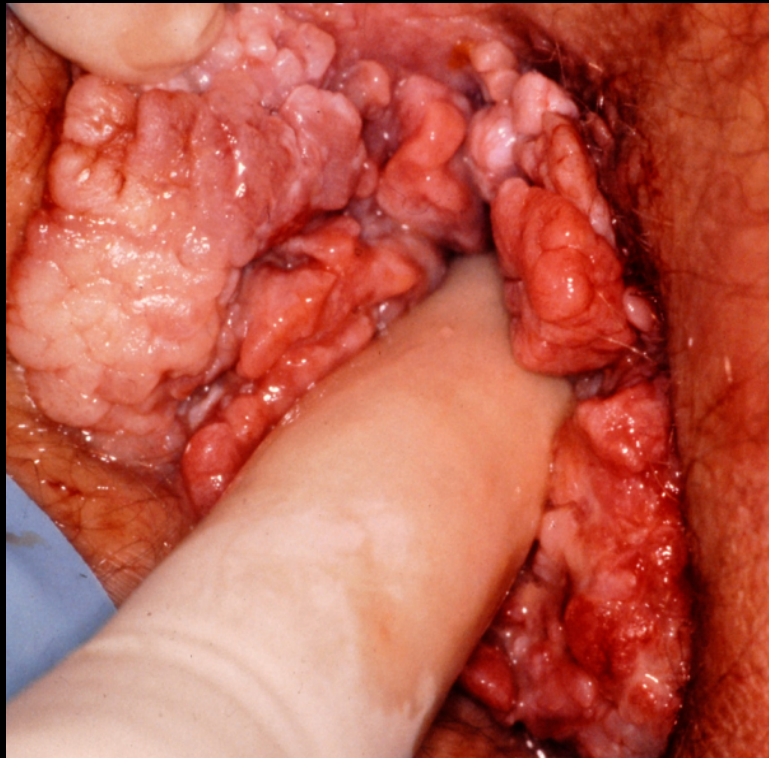


TABLE 1. RISK FACTORS FOR ANAL CANCER.

Strong evidence

Human papillomavirus infection (anogenital warts)

History of receptive anal intercourse

History of sexually transmitted disease

More than 10 sexual partners

History of cervical, vulvar, or vaginal cancer

Immunosuppression after solid-organ transplantation

Moderately strong evidence

Human immunodeficiency virus infection

Long-term use of corticosteroids

Cigarette smoking

Anal Cancer and HIV+

- 2008 US Patel et al:
RR 43 for anal cancer in HIV+ patients

RR increased between 1992-2003: 19 → 48 → 72
- 2008 France Piketty et al:
1992-2004: RR 11 → 40
- Incidence anal cancer HIV+ MSM San Diego:
0 (1991) → 224 per 100.000/yr (2000)
RR 352 (95% CI 186-669)

Pre-cursor lesion: AIN

- AIN: Anal Intraepithelial Neoplasia
- Premalignant
- AIN 1, AIN 2, AIN 3
- Oncogenic HPV: Human Papilloma Virus
- HPV 16 & 18

HPV and AIN in HIV+ MSM

- Palefsky et al 2005 (San Francisco, n= 357)

HIV+ MSM:

- 95% anal HPV, 88%>1 HPV-type
- 81 % AIN of any grade
- 52% high grade AIN (AIN 2 or 3)
- High grade AIN: 98% HPV-positive

AIN progression

- 50 % van AIN I → AIN II/III (2-4 yr)
- AIN 2/3: regression is unusual
- Progression of CIN (Cervical Intraepithelial Neoplasia) McCredie et al 2008: inadequate treatment of CIN III: 31,3% cervixca.

AIN diagnostics

- Anal cytology
Sensitivity: 69-93%
Specificity: 32-59%
→ Comparable to cervical cytology
- High Resolution Anoscopy: Proctoscopy + Colposcopy
 1. Application acetic acid 5%
 2. Inspection of distal rectum, transformation zone and anal canal at 30-fold magnification
 3. Biopsy in case of suspect lesions

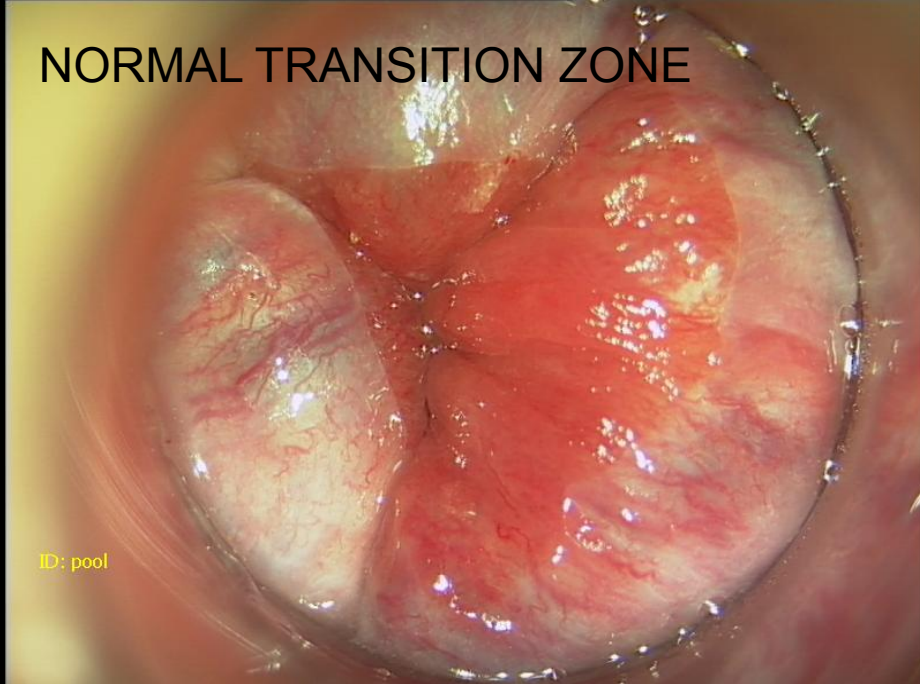
High Resolution Anoscopy



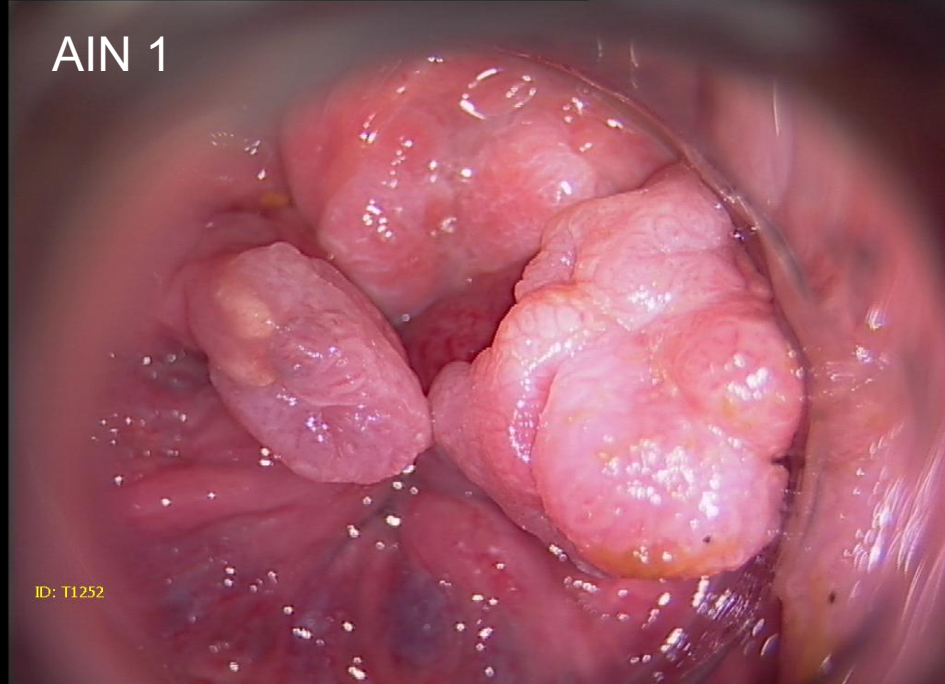
Olivier Richel



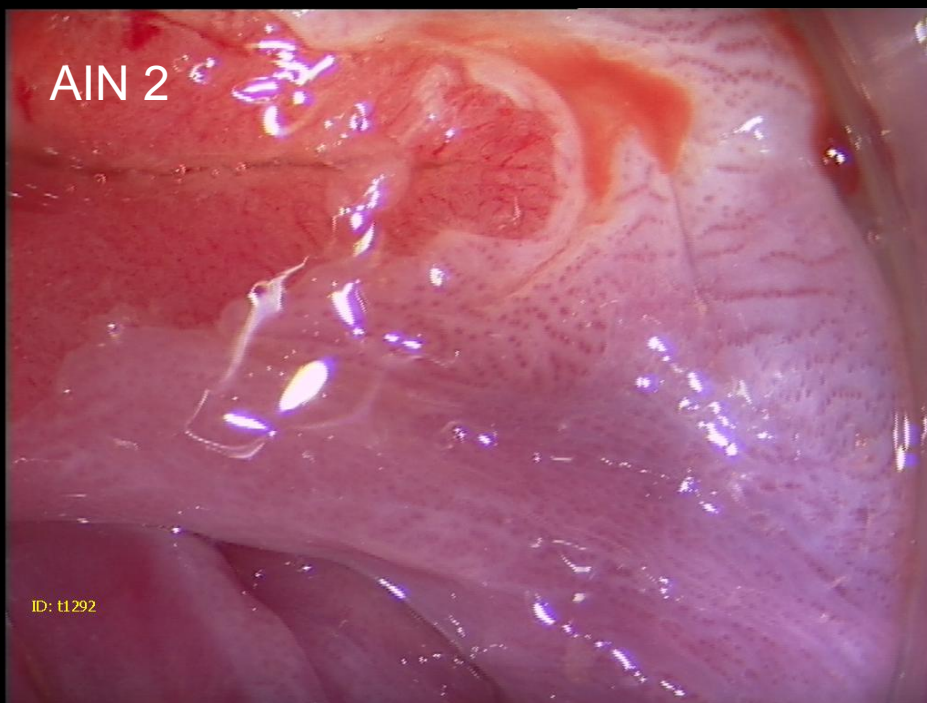
NORMAL TRANSITION ZONE



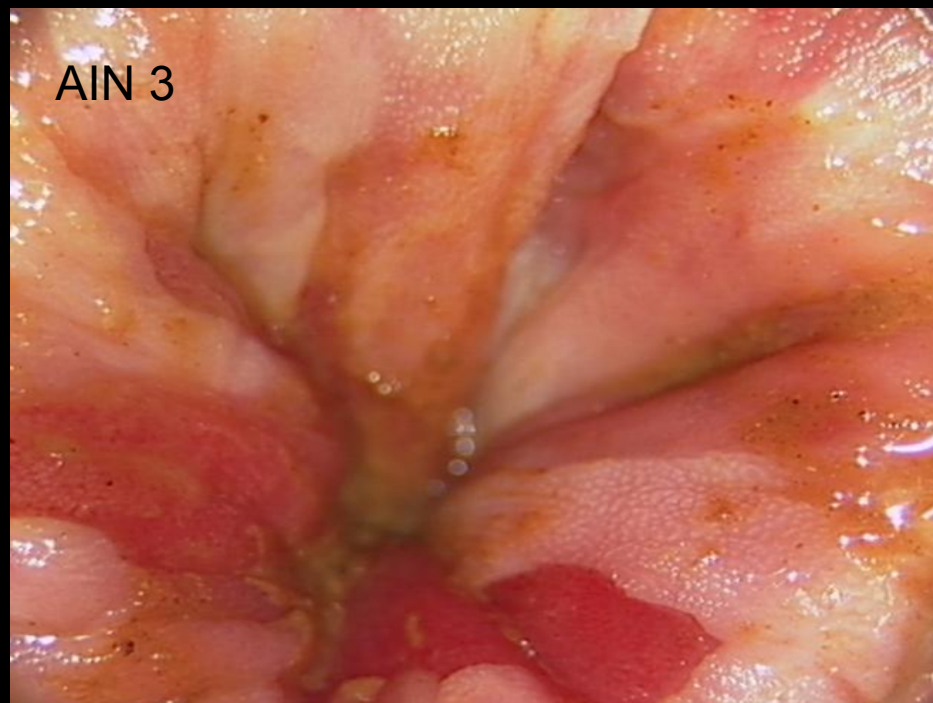
AIN 1



AIN 2



AIN 3



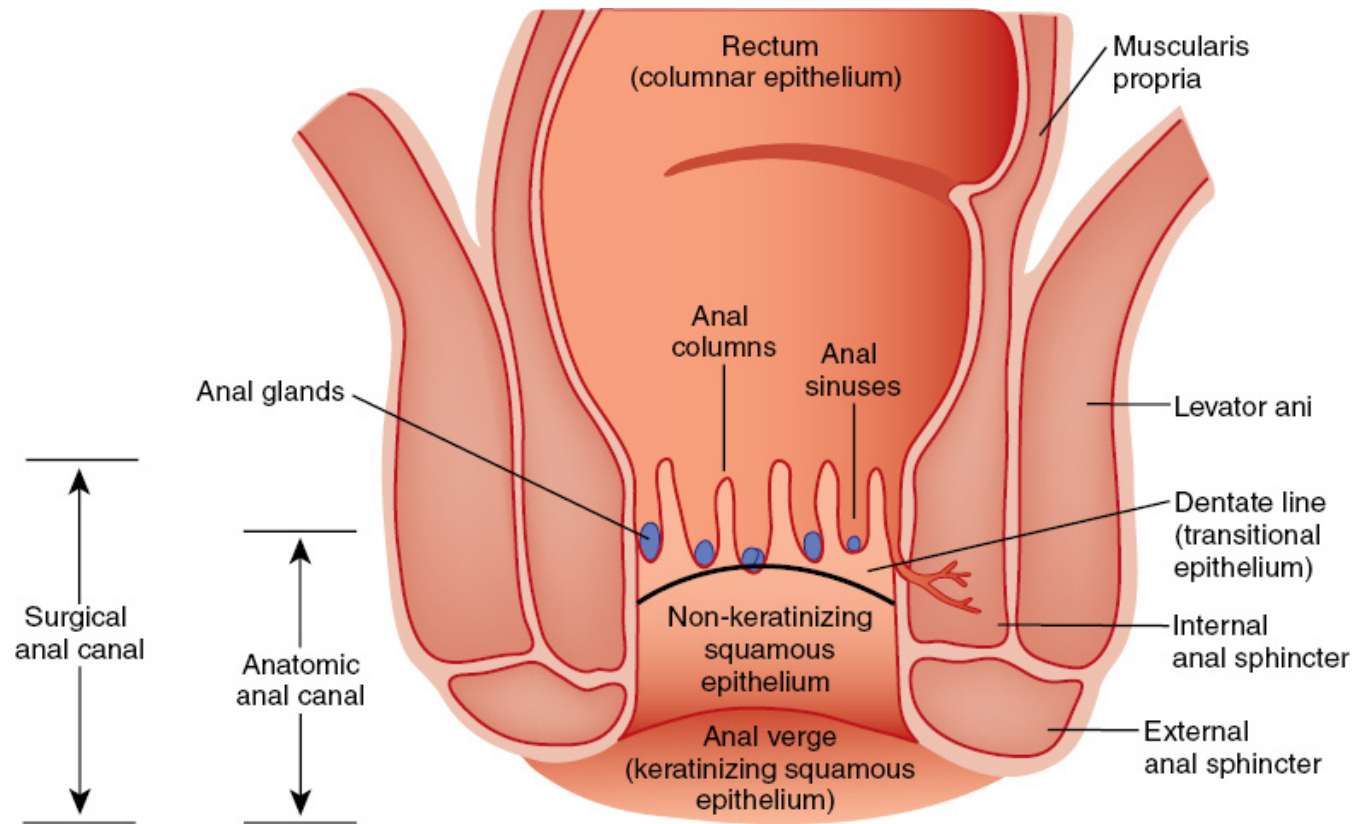
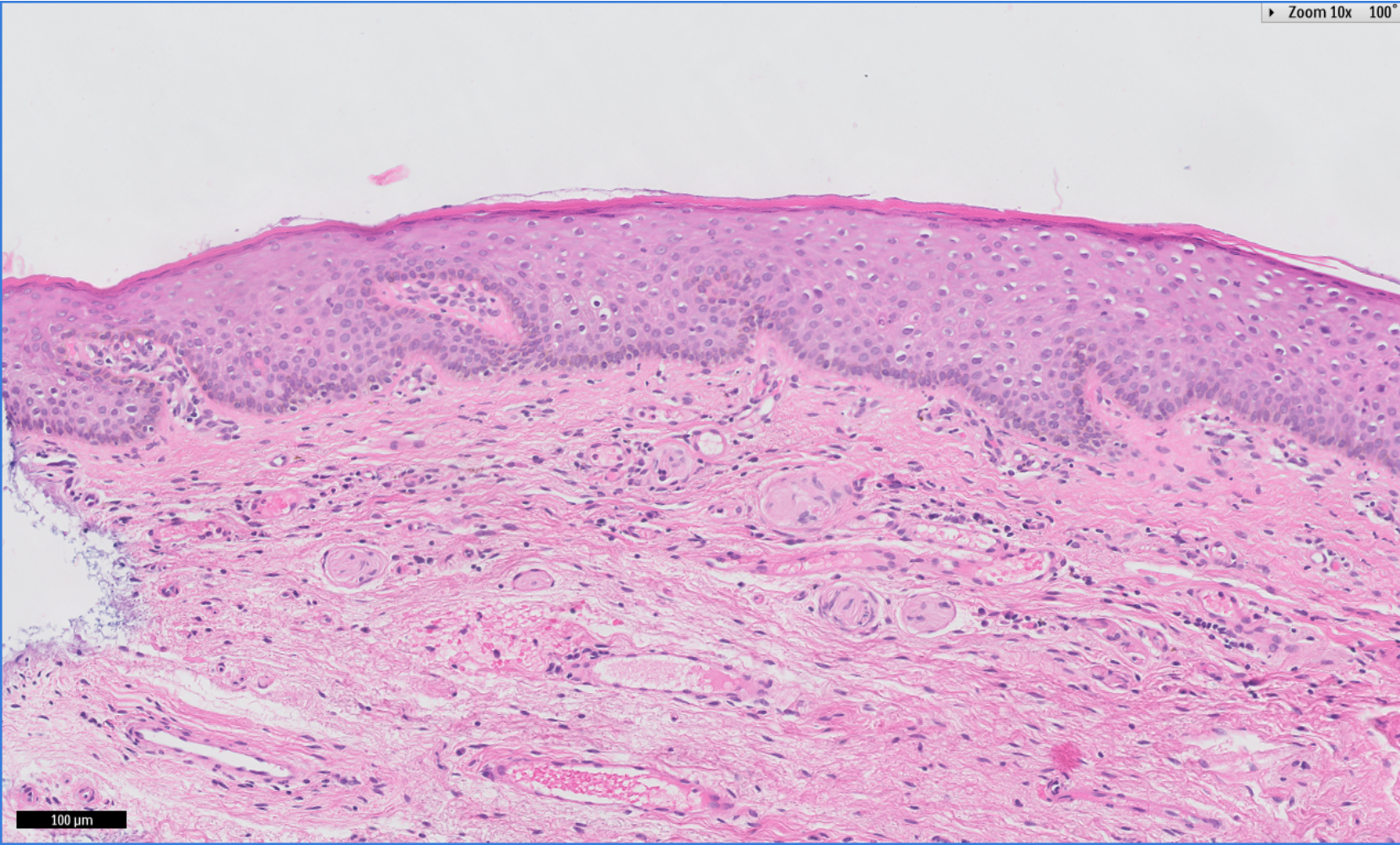
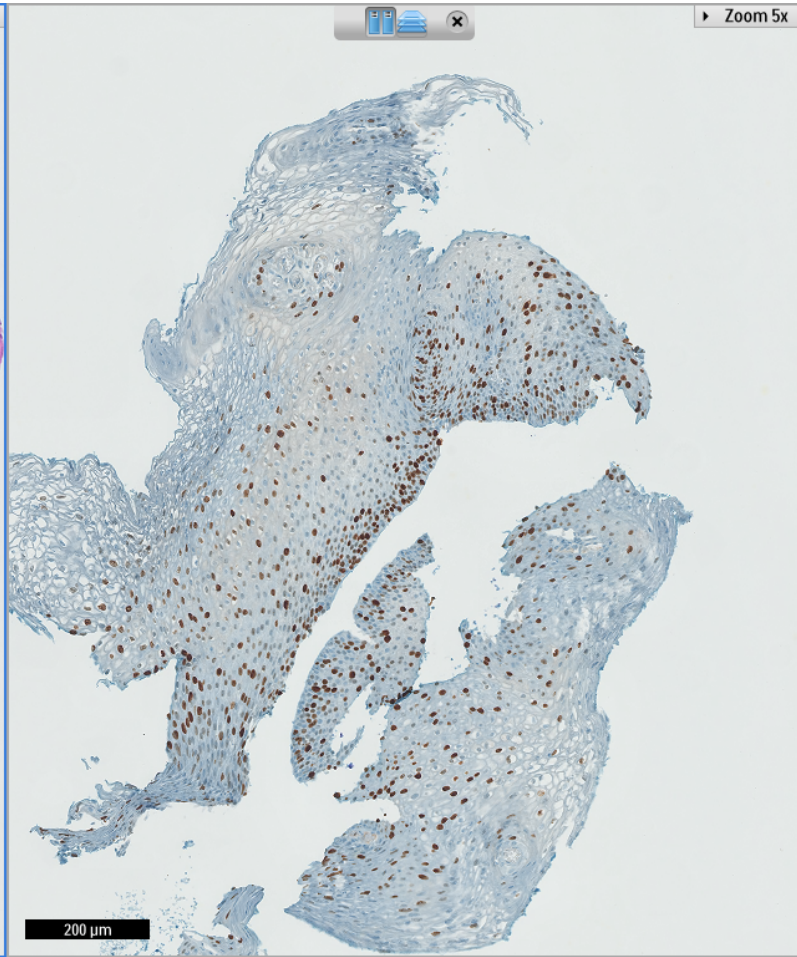
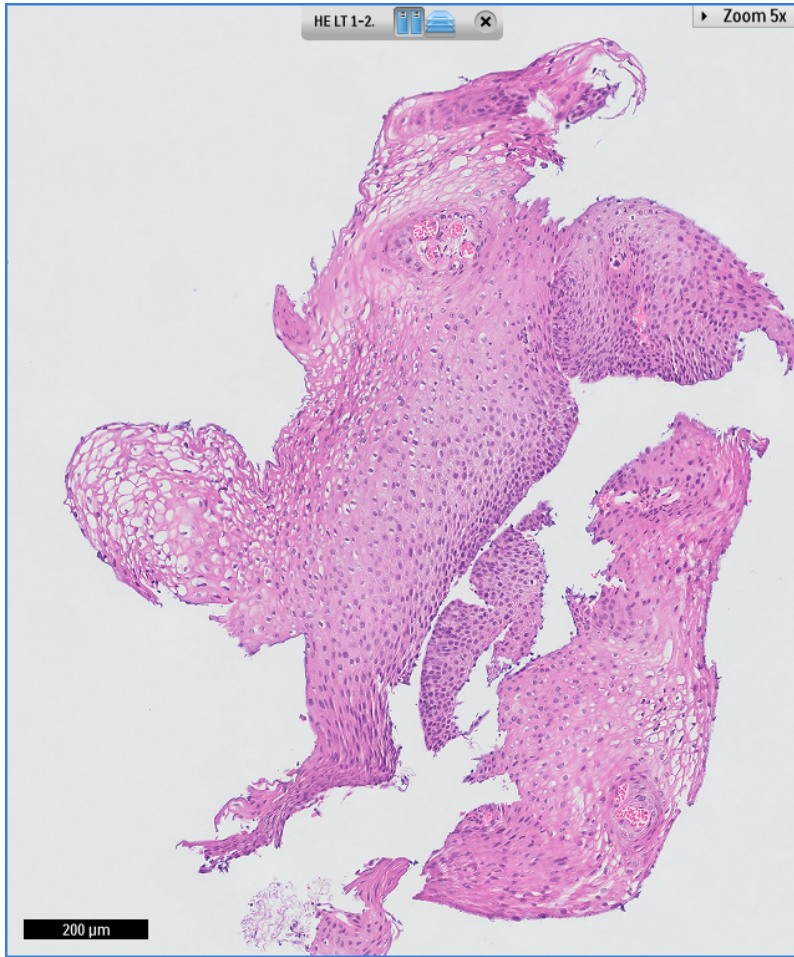


FIGURE 28-1 Anatomic features of the anal canal.

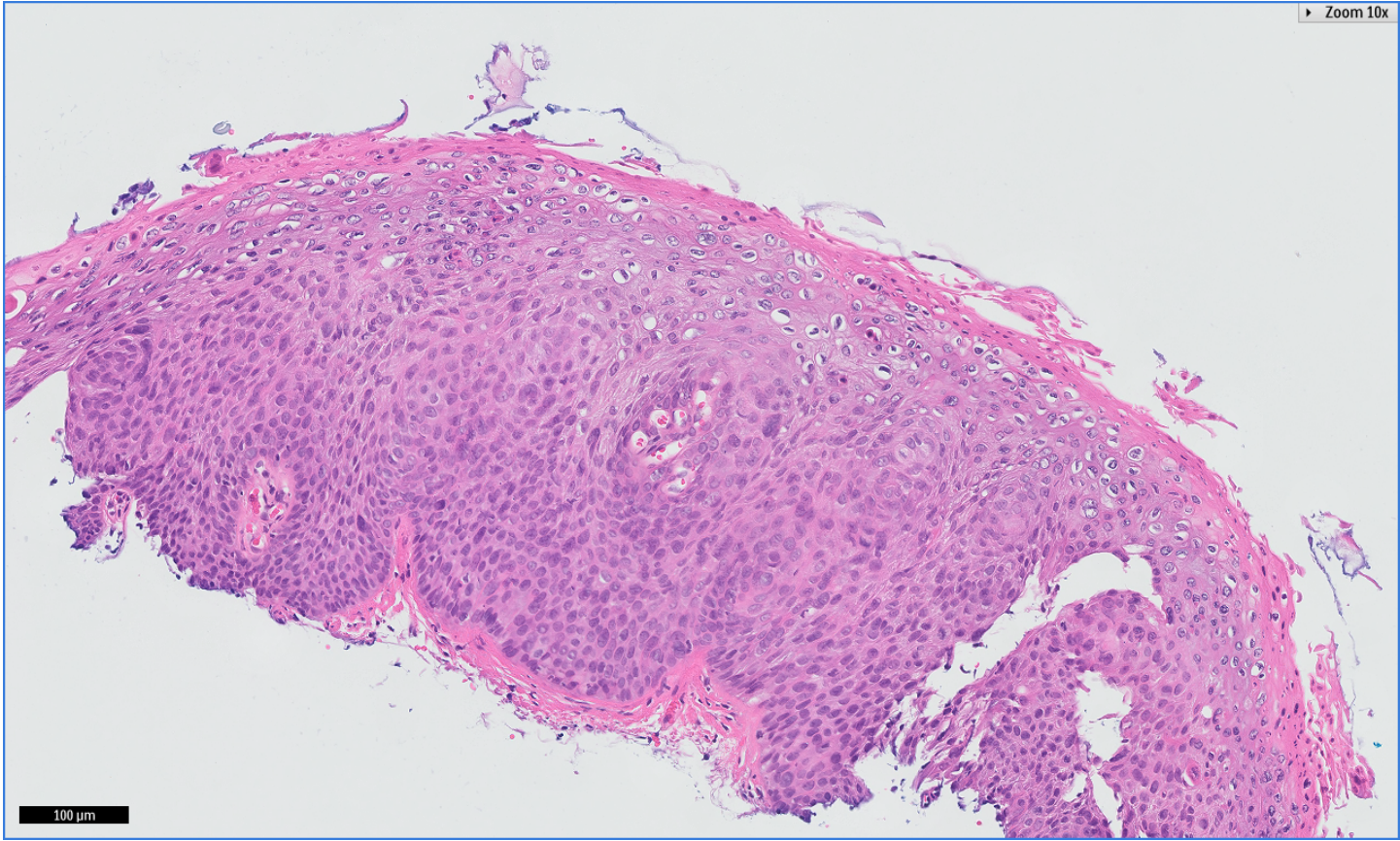
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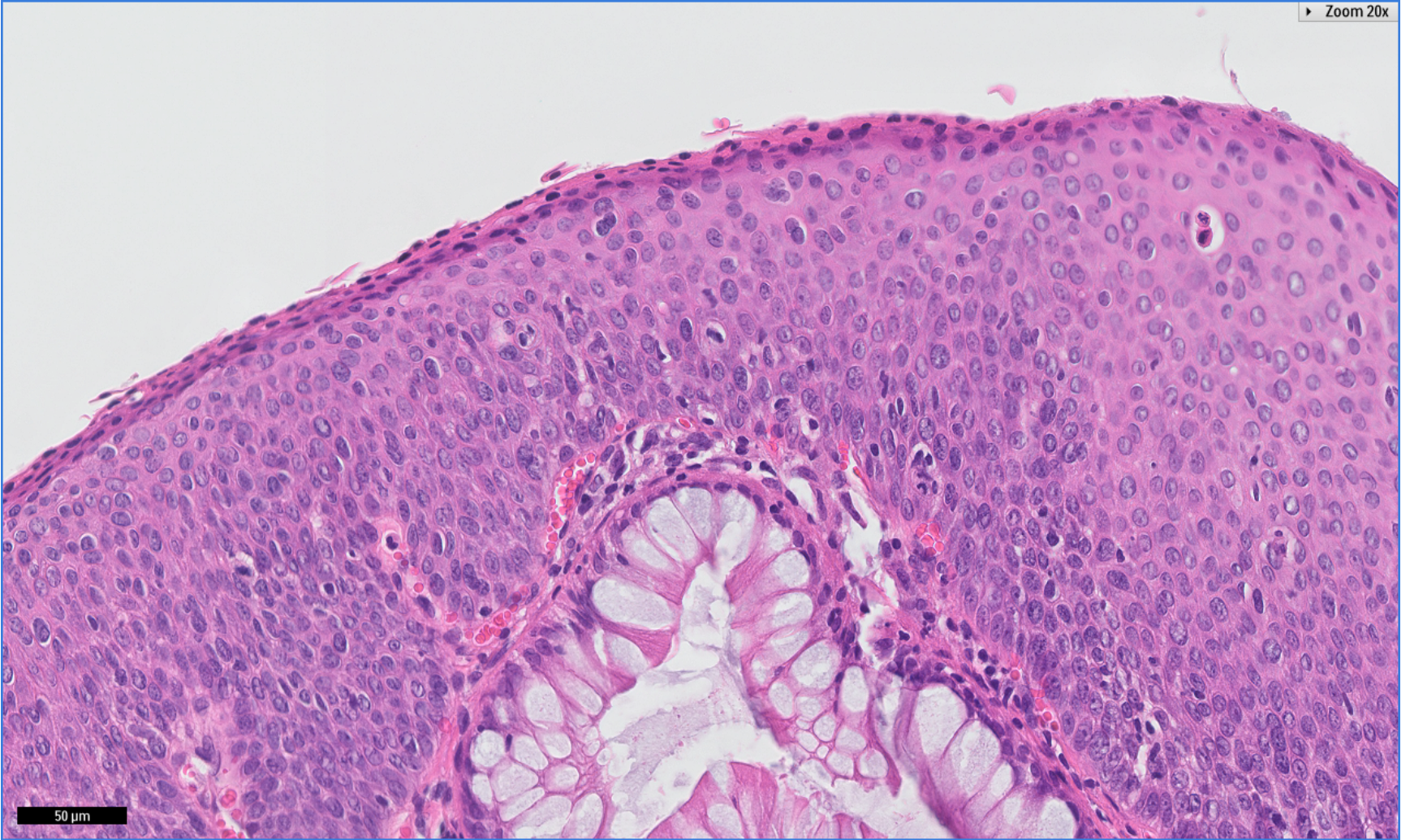
100 μm



▶ Zoom 10x

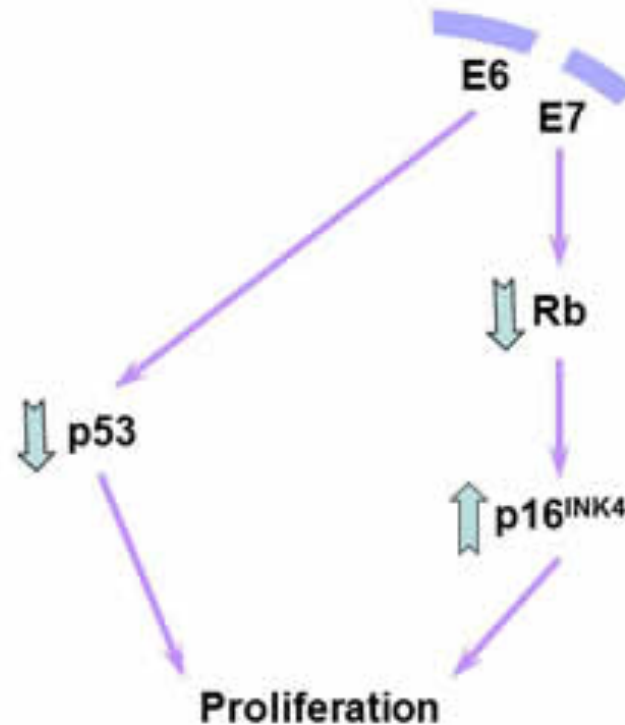


100 μ m

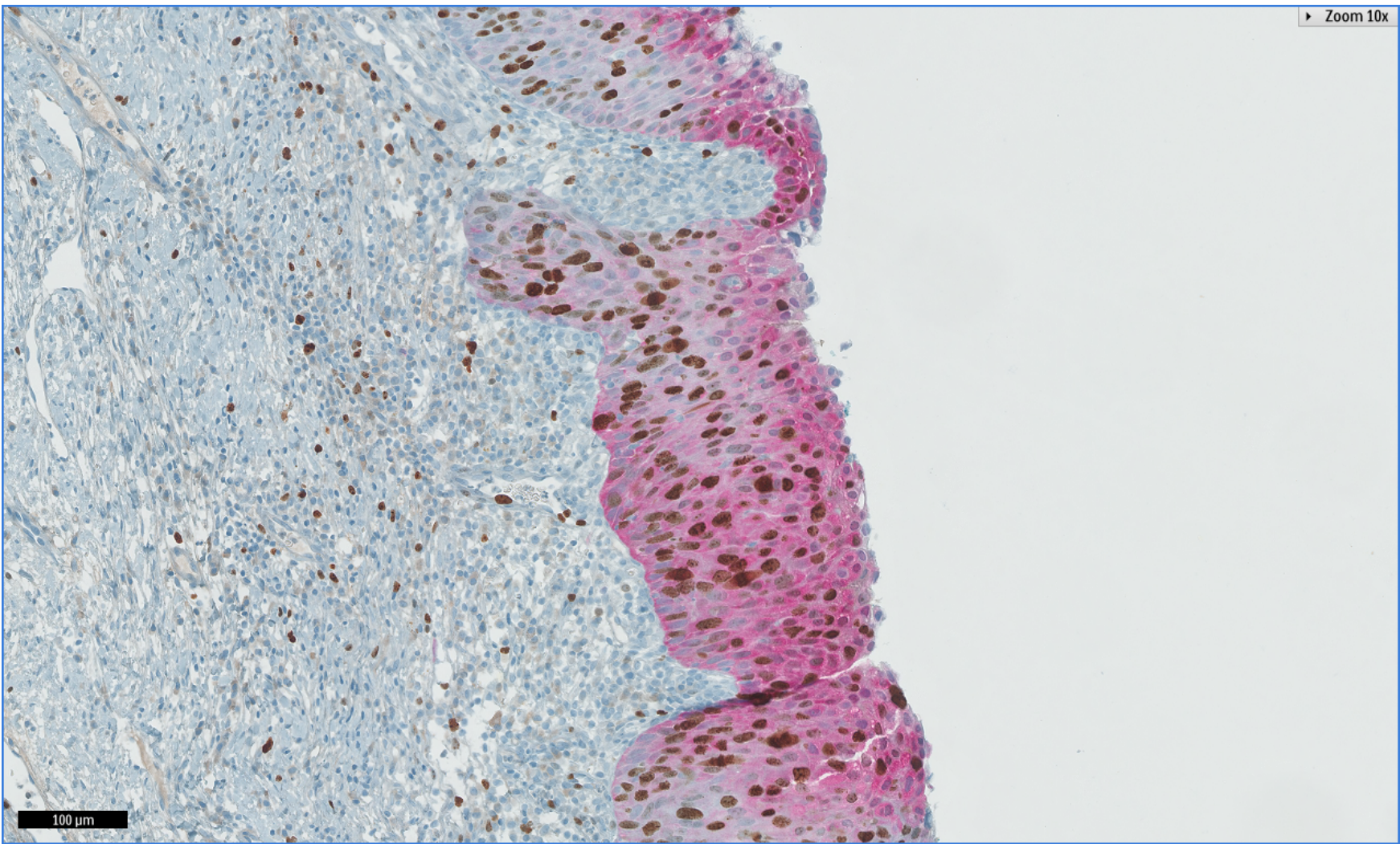


50 μ m

HPV in OPSCC Oncogenesis — Pathways



HPV Testing in Oropharyngeal Squamous Cell Carcinoma



100 μm

RICHTLIJN ANUSCARCINOOM 2013

Screening en preventie

- Standaard screening bij HIV+ mannen die seks hebben met mannen (MSM) of andere risicogroepen wordt niet aanbevolen.
- Diagnostiek en gradering van Anale Intraepitheliale Neoplasie (AIN) gebeurt op basis van histologisch onderzoek.
- Geen indicatie voor routinematig HPV analyse bij HIV+ MSM of andere risicogroepen.
- Een HIV-test is te overwegen

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Behandeling

Vorstadium, Anale Intraepitheliale Neoplasie (AIN)

- AIN1: jaarlijkse controle
- AIN2/3: bij voorkeur electro- of infraroodcoagulatie, eventueel Imiquimod
- (micro)invasief plaveiselcelcarcinoom: radicale locale excisie; indien niet mogelijk zonder mutilatie van de anale sfincter-complex :(chemo)radiotherapie

WHO classification* of tumours of the anal canal

Epithelial tumours

Premalignant lesions

Anal intraepithelial neoplasia (dysplasia), low grade
Anal intraepithelial neoplasia (dysplasia), high grade

Bowen disease

Perianal squamous intraepithelial neoplasia

Paget disease

Carcinoma

Squamous cell carcinoma

Verrucous carcinoma

Undifferentiated carcinoma

Adenocarcinoma

Mucinous adenocarcinoma

*Neuroendocrine neoplasms***

Neuroendocrine tumour (NET)

NET G1 (carcinoid)

NET G2

Neuroendocrine carcinoma (NEC)

Large cell NEC

Small cell NEC

Mixed adenoneuroendocrine carcinoma

Mesenchymal tumours

Secondary tumours

* Morphology code of the International Classification of Diseases for Oncology (ICD-O). Behaviour is coded /0 for benign tumours, /1 for unspecified, borderline or uncertain behaviour, /2 for carcinoma in situ and grade III intraepithelial neoplasia, and /3 for malignant tumours.

** The classification is modified from the previous (third) edition of the WHO histological classification of tumours (691) taking into account changes in our understanding of these lesions. In the case of neuroendocrine neoplasms, the classification has been simplified to be of more practical utility in morphological classification.

WHO classification of Tumours of the Digestive System

Edited by Fred T. Bosman, Fátima Carneiro, Ralph H. Hruban, Neil D. Theise

- Nonkeratinizing squamous carcinoma
- ◆ Squamous carcinoma with basaloid features
- ▲ Keratinizing squamous carcinoma
- Adenocarcinoma
- ★ Paget's disease
- ⊕ Melanoma
- Giant condyloma and verrucous carcinoma
- Bowen's disease

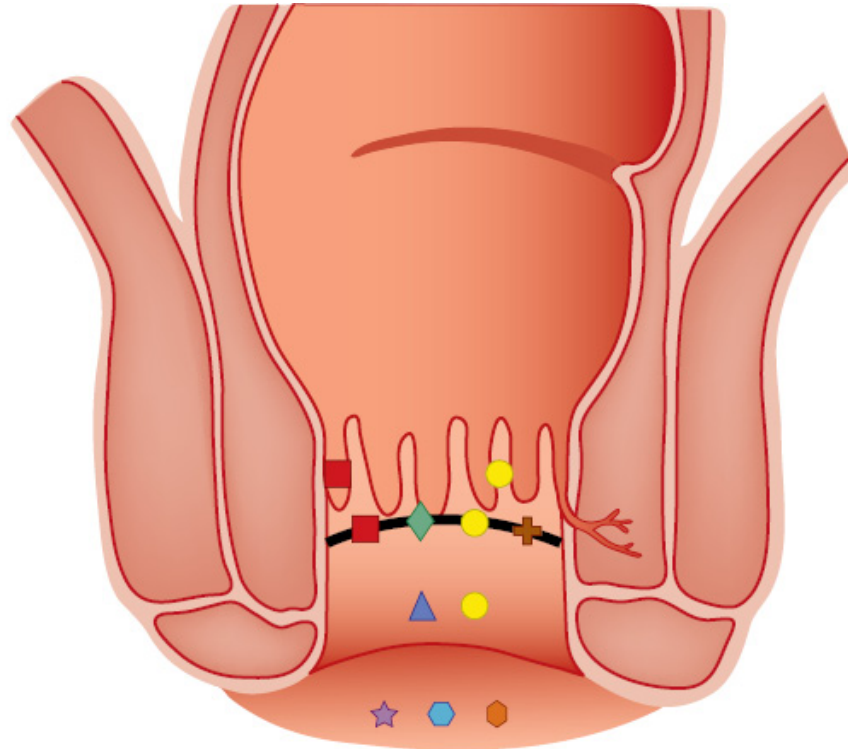
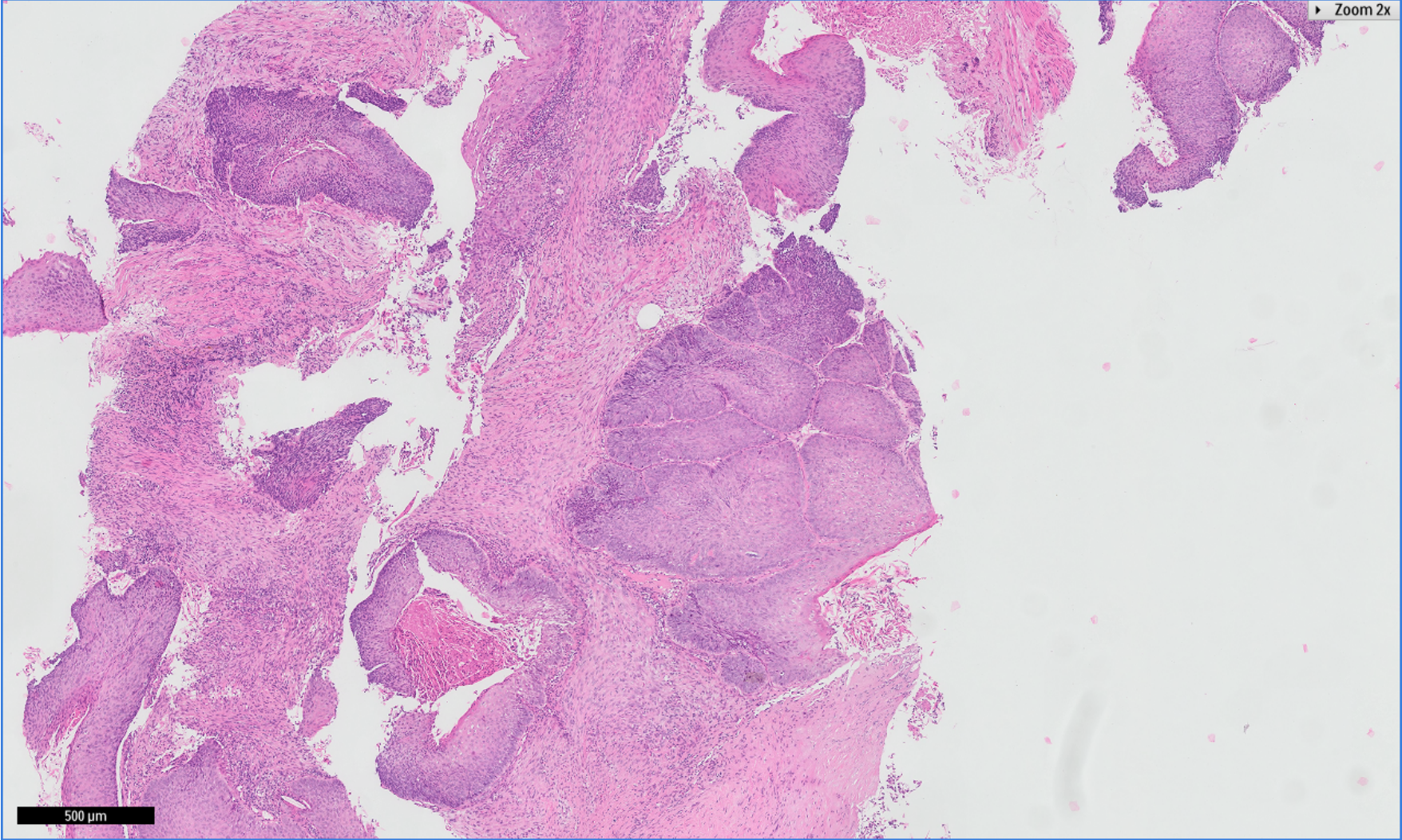


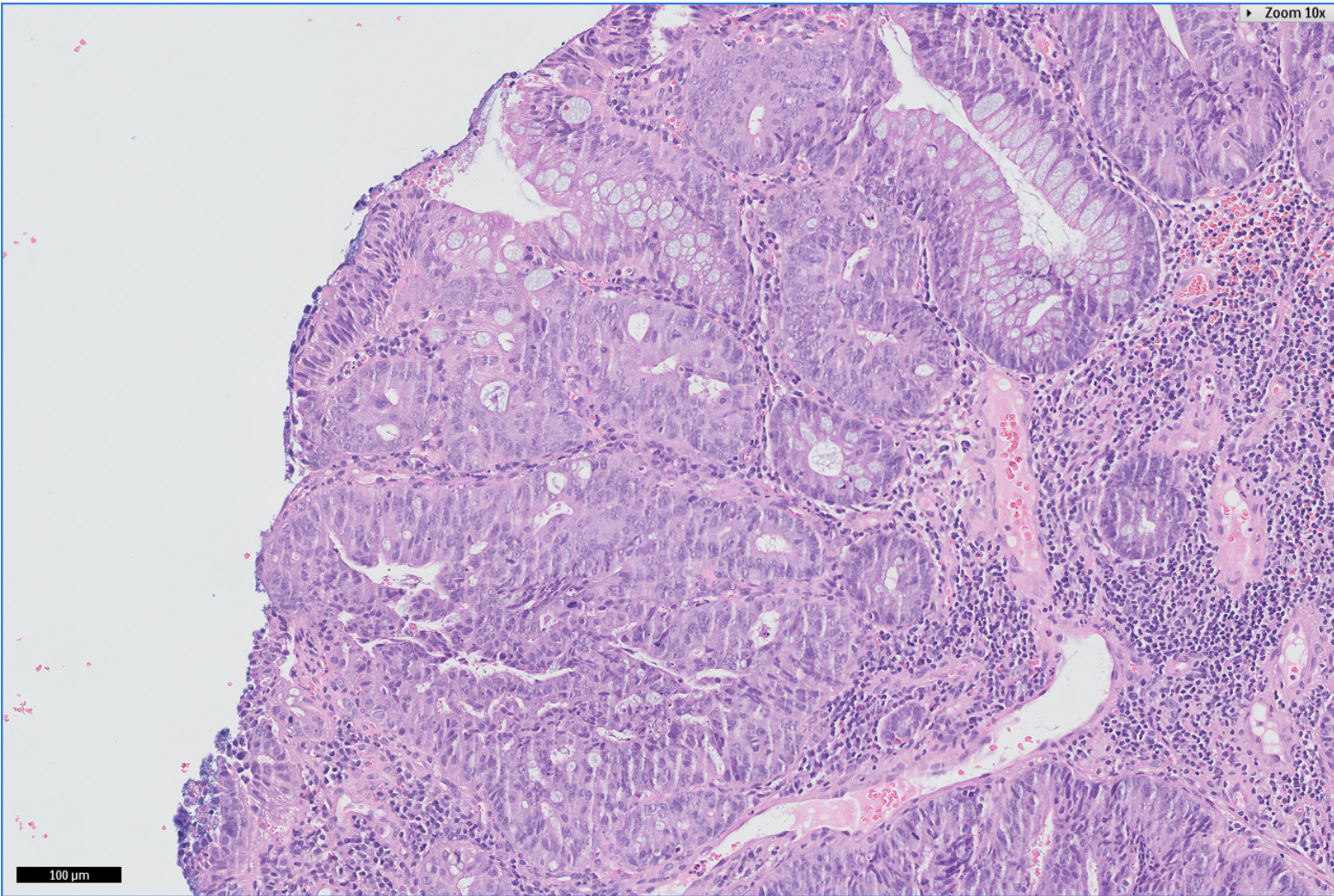
FIGURE 28-15 Most common locations of anal canal neoplasms.

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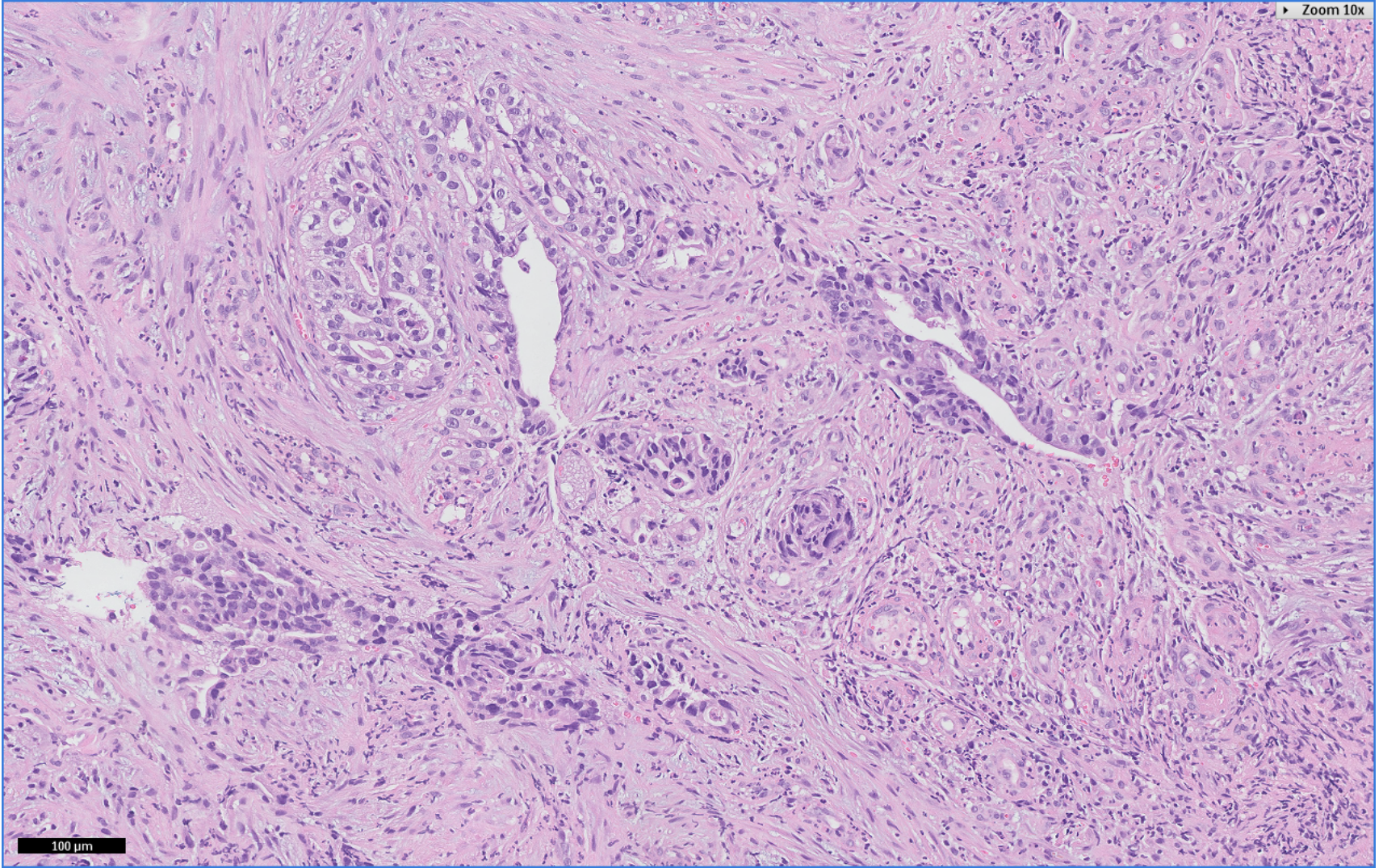
500 μ m

Zoom 10x



100 μm

▶ Zoom 10x



100 μ m

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Diagnostiek

- lichamelijk onderzoek en eventueel cytologie van de liesklieren middels dunne naald punctie
- geen routinebepaling van serologische tumormarkers
- $\geq T2$: MRI heeft eventuele meerwaarde in de evaluatie van lokale en regionale tumoruitbreiding
- EAUS heeft alleen meerwaarde in ervaren handen, m.n. voor beoordeling transmurale uitbreiding
- FDG-PET kan nuttig zijn in de stadiëring en bij het uitwerken van een bestralingsplan; indien mogelijk steeds bevestigen met cytologisch of histologisch onderzoek

RICHTLIJN ANUSCARCINOOM 2013

Invasief plaveiselcelcarcinoom van de anus

- Curatieve chirurgie is beperkt tot een ruime locale excisie (> 1 cm marge) van oppervlakkig groeiende goed gedifferentieerde perianale tumoren, stadium cT1N0.
- Chemoradiotherapie is de behandeling van keuze voor de meeste patiënten met anuscarcinoom.
- MMC/5-FU is het voorkeurschema bij het niet-gemetastaseerde anuscarcinoom.
- Intensity-modulated radiotherapie (IMRT) of conformatie radiotherapie (CF-RT) heeft de voorkeur boven conventionele bestraling (CV-RT).
- Bij tumoren $\geq 1-2$ cm, dan wel voor tumoren met aangetoonde regionale kliermetastasen, is het doelgebied voor bestraling de primaire tumor en de regionale kliergebieden