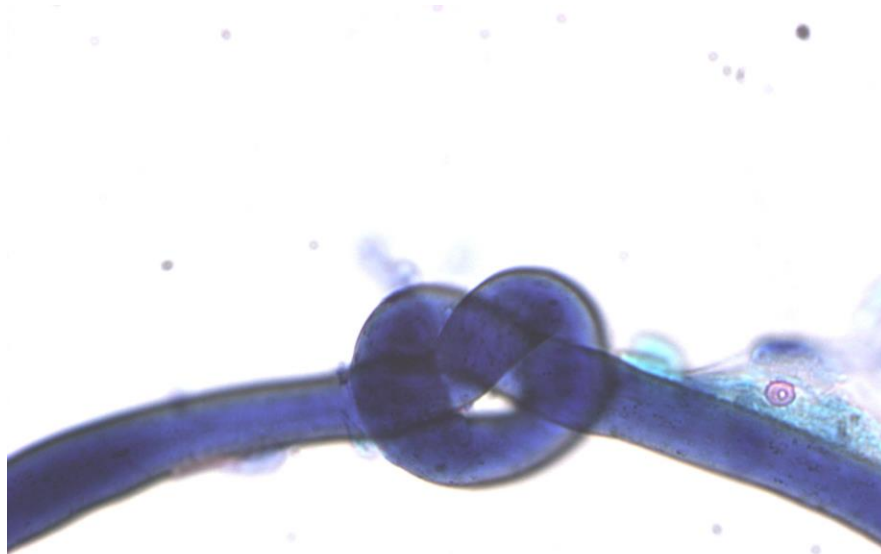


Celler och andra komponenter i en kastad urin



KVAST

**Kvalitetsutveckling och Standardisering av diagnostik inom
klinisk patologi och cytologi**



Urinvägarna

- **Kastad urin**
- **KAD (kateter à demeure)**
 - Ren Intermittent Kateterisering (RIK) ,tömning av urinblåsan.
 - Nefrostomi, dränerar urin direkt från njuren ut genom huden i flanken.
- **Brickerblåsa, urostomi: en bit tunntarm som sys fast som ett rör på urinledarna.**
- **Blås/uretrasköljvätska / Tappad**
- **Uretär**

Anamnes, frågeställning (inkl tidigare behandling):

24 CL

Tutymre T1b2 & C15.
Senaste urin cytologierna varit
Paris 3.
Cystoskopi ur
Maligna celler?

Det framgår inte att provet tagit direkt efter cystoskopi

Snabbsvär

Tel nr

<input type="checkbox"/> Bronkborste	<input type="checkbox"/> Ascites	<input type="checkbox"/> Livor	<input type="checkbox"/> Urin cytologi	<input type="checkbox"/> Övrigt	Antal suffix glas	
<input type="checkbox"/> Bronskölvätska	<input type="checkbox"/> Pleura	<input type="checkbox"/> Mammarsekret	<input checked="" type="checkbox"/> Kastad		Antal spritlik glas	
<input type="checkbox"/> Sputum	<input type="checkbox"/> Blåskölvätska	<input type="checkbox"/> Vulva	<input type="checkbox"/> Tappad		Antal insockade bukal/provvrör	/
			<input type="checkbox"/> KAD			
			<input type="checkbox"/> Blåskölvätska			

Anamnes, frågeställning (inkl tidigare behandling):

23 CL

ATYPI?

Läkare: Veronika

Snabbsvär

Tel nr

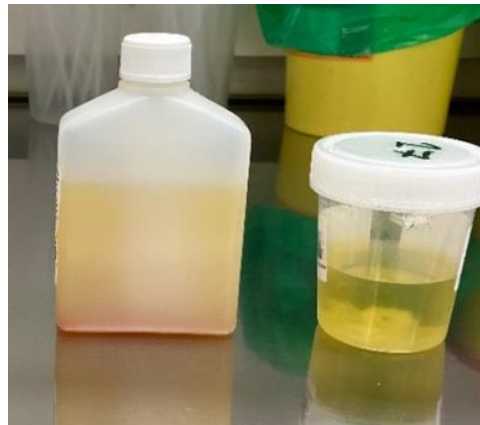
Ingen uppgift om provets beskaffenhet

<input type="checkbox"/> Bronkborste	<input type="checkbox"/> Ascites	<input type="checkbox"/> Livor	<input type="checkbox"/> Urin cytologi	<input type="checkbox"/> Övrigt	Antal suffix glas	
<input type="checkbox"/> Bronskölvätska	<input type="checkbox"/> Pleura	<input type="checkbox"/> Mammarsekret	<input type="checkbox"/> Kastad		Antal spritlik glas	
<input type="checkbox"/> Sputum	<input type="checkbox"/> Blåskölvätska	<input type="checkbox"/> Vulva	<input type="checkbox"/> Tappad		Antal insockade bukal/provvrör	
			<input type="checkbox"/> KAD			
			<input type="checkbox"/> Blåskölvätska			

Datum: _____ Namnunderskrift: _____ Namnförtydligande: _____ REGID: _____

Förberedande av prov från urinvägarna

- Laboratoriets interna anteckningar - på remissen
- **Kastad urin:**
Rekommenderad urinmängd 50–100 ml
Ljuskula, mörkgula, halmgula, orange, klar



Patientinstruktion för urincytologi

Urinprov till cytologisk undersökning används för att undersöka cellerna i urinvägarna vid olika sjukdomstillstånd i urinvägarna.



1- Tvätta och torka händerna.



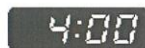
2- Dra tillbaka förhuden/håll isär blygdläpparna, kissa (*ej morgonurin*) i provtagningskärl/mugg.



3- Fyll flaskan (100ml) som du fått från urologmottagningen.



4- Sätt på etiketten med ditt personnummer och namn på flaskan.



5- Om du ska lämna 2 prover, ska det vara 4 timmar mellan provtagningarna.

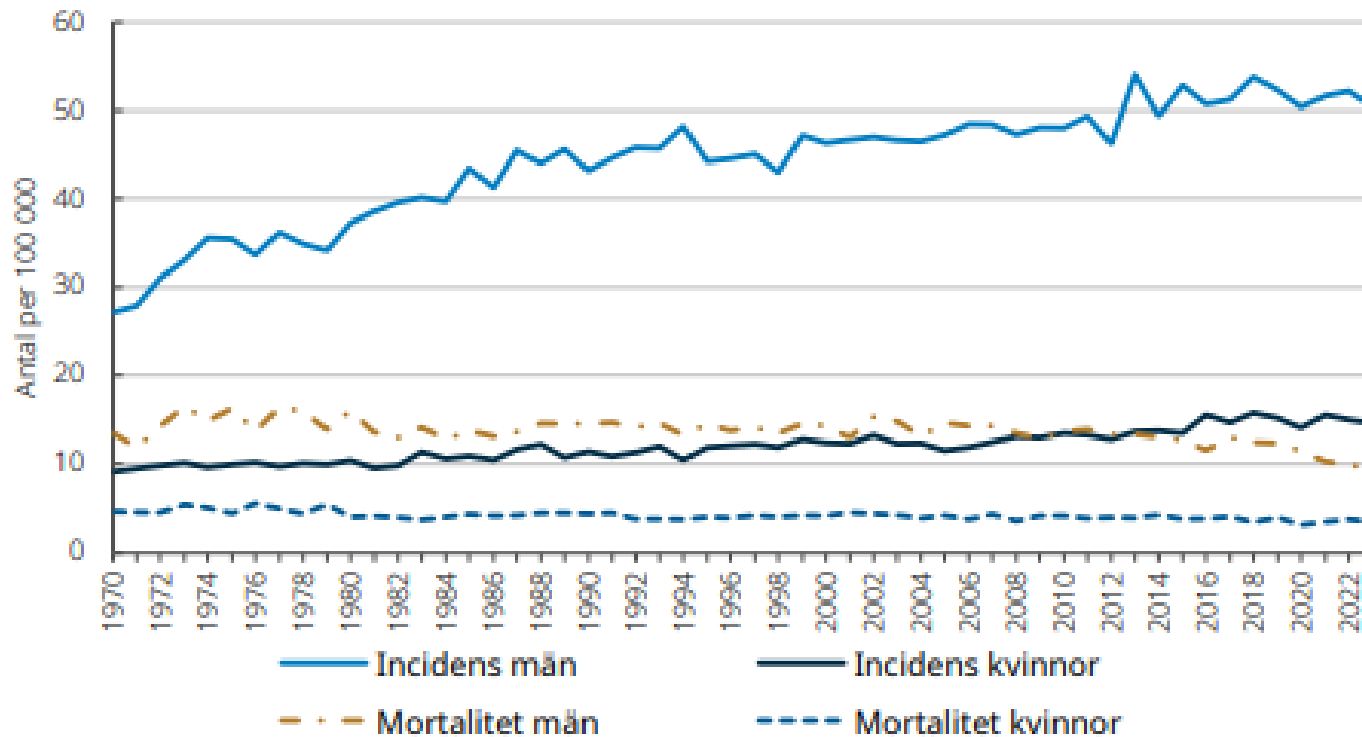


6- Förvara provet i kylskåp, högst en dag, om du inte ska lämna provet samma dag.



7- Lämna provet och remissen till den mottagning som du besökte.

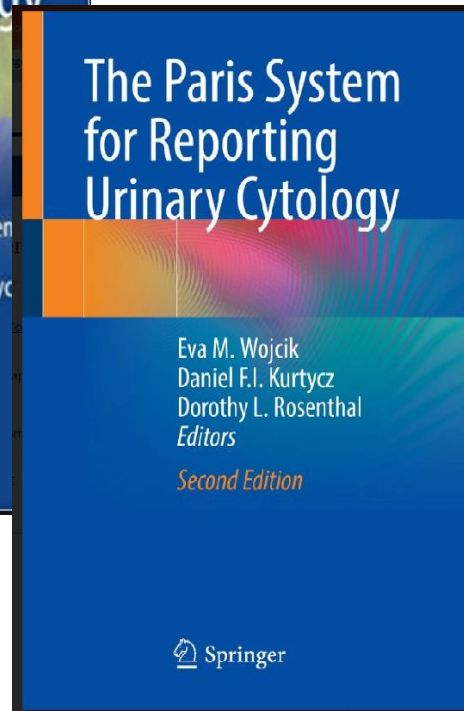
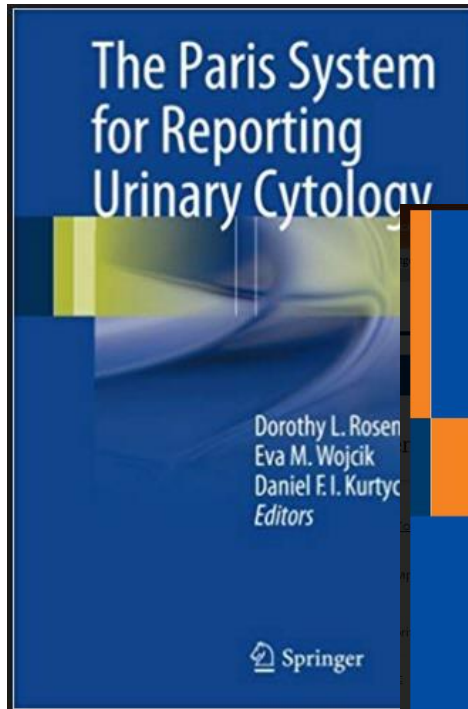
Inte första urin på morgonen



Källa: Cancerregistret och Dödsorsaksregistret, Socialstyrelsen

- Den 7:e vanligaste cancerformen
- I Sverige utgör blåscancer ca 7 % av alla cancerformen hos män och 3 % hos kvinnor
- Årligen upptäcks ca 3 000 nya fall
- Mortaliteten i sjukdomen är ca 600-700 fall per år i Sverige
- *Under perioden 2019–2023 avled årligen 450 män, 200 kvinnor*

Paris system



Paris system

Contents

1	Pathogenesis of Urothelial Carcinoma 1
	Kaitho E. Sonding, Tajana Antic, and Stefan E. Pambuccian
2	Adequacy of Urine Specimens (Adequacy) 7
	Z. Laura Tabatabai, Güliz A. Barkan, Monique Courtade-Saidi, Daniel F.I. Kurtycz, Matthew T. Olson, Toyonori Tsuzuki, Christopher J. VandenBussche, and Poonam Vohra
3	Negative for High-Grade Urothelial Carcinoma (NHGUC) 21
	Christopher J. VandenBussche, Ashish Chandra, Jonas J. Heymann, Zulfia McCroskey, Christopher L. Owens, Pawel T. Schubert, and Yeh-Han Wang
4	Atypical Urothelial Cells (AUC) 63
	Güliz A. Barkan, Margaret L. Compton, Tarik M. Elsheikh, Kim A. Ely, Daniel F.I. Kurtycz, Merce Jorda, Zahra Maleki, Sachiko Minamiguchi, Hiroshi Ohtani, Eric Piaton, Bo Ping, Spasenija Savic Prince, Z. Laura Tabatabai, and Christopher J. VandenBussche
5	Suspicious for High-Grade Urothelial Carcinoma (SHGUC) 85
	Fadi Brimo, Manon Auger, Ivan Chebib, Tarik M. Elsheikh, Mitsuru Kinjo, Eric Piaton, Marc Pusztazeri, and Tatsuro Shimokama
6	High-Grade Urothelial Carcinoma (HGUC) 97
	Momin T. Siddiqui, Derek B. Allison, Guido Fadda, Jee-Young Han, Patrick J. McIntire, Christopher L. Owens, Z. Laura Tabatabai, Toyonori Tsuzuki, and Mingjuan Lisa Zhang
7	Cytopathology of the Upper Urinary Tract 115
	Christopher J. VandenBussche, Jen-Fan Hang, Patrick J. McIntire, Yurina Miki, Stephen Peyton, Poonam Vohra, and Mingjuan Lisa Zhang
8	Non-Urothelial Malignancies and Other Miscellaneous Lesions 143
	Tarik M. Elsheikh, Rana S. Hoda, Stefan E. Pambuccian, Jae Y. Ro, and Sun Hee Sung

P 1

P 2

P 3

P 4

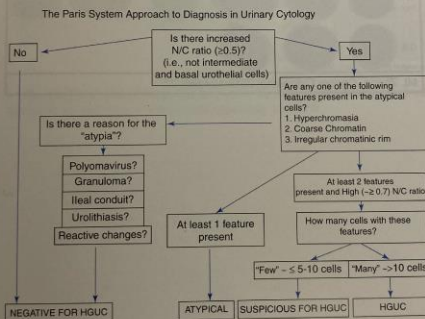
P 5

P 6

Introduction

When The Paris System for Reporting Urinary Cytology (TPS) was introduced in 2016, the new paradigm needed guidelines. Over the past 5 years, experience has provided evidence that the proposed criteria are effective. As aids for microscopists when dealing with a cytology slide, the authors of TPS 2.0 present the following in this section:

1. Decision Tree emphasizing changes in N/C ratios as morphologic findings worsen.



Graphic algorithm of the Paris System for Reporting Urinary Cytology decision tree. The system emphasis is on the detection of High-Grade Urothelial Carcinoma (HGUC). This snapshot conceptual flowchart illustrates the major points in the decision tree including evaluation of the N/C ratio, nuclear features, and cell quantity. Ref: We'll Always Have Paris: The Paris System for Reporting Urinary Cytology 2022, Eva M. Wojcik, Daniel F.I. Kurtycz, Dorothy L. Rosenthal. J Am Soc Cytopathol. online preprint. DOI: <https://doi.org/10.1016/j.jasc.2021.12.03>

Paris system

Paris 1 - Otillräckligt material eller otillfredsställande

Paris 2 - Inga hållpunkter för höggradiga maligna uroteliala celler

Paris 3 - Urotelial cellatypi

Paris 4 - Misstanke på höggradiga maligna uroteliala celler

Paris 5 - Höggradiga maligna uroteliala celler

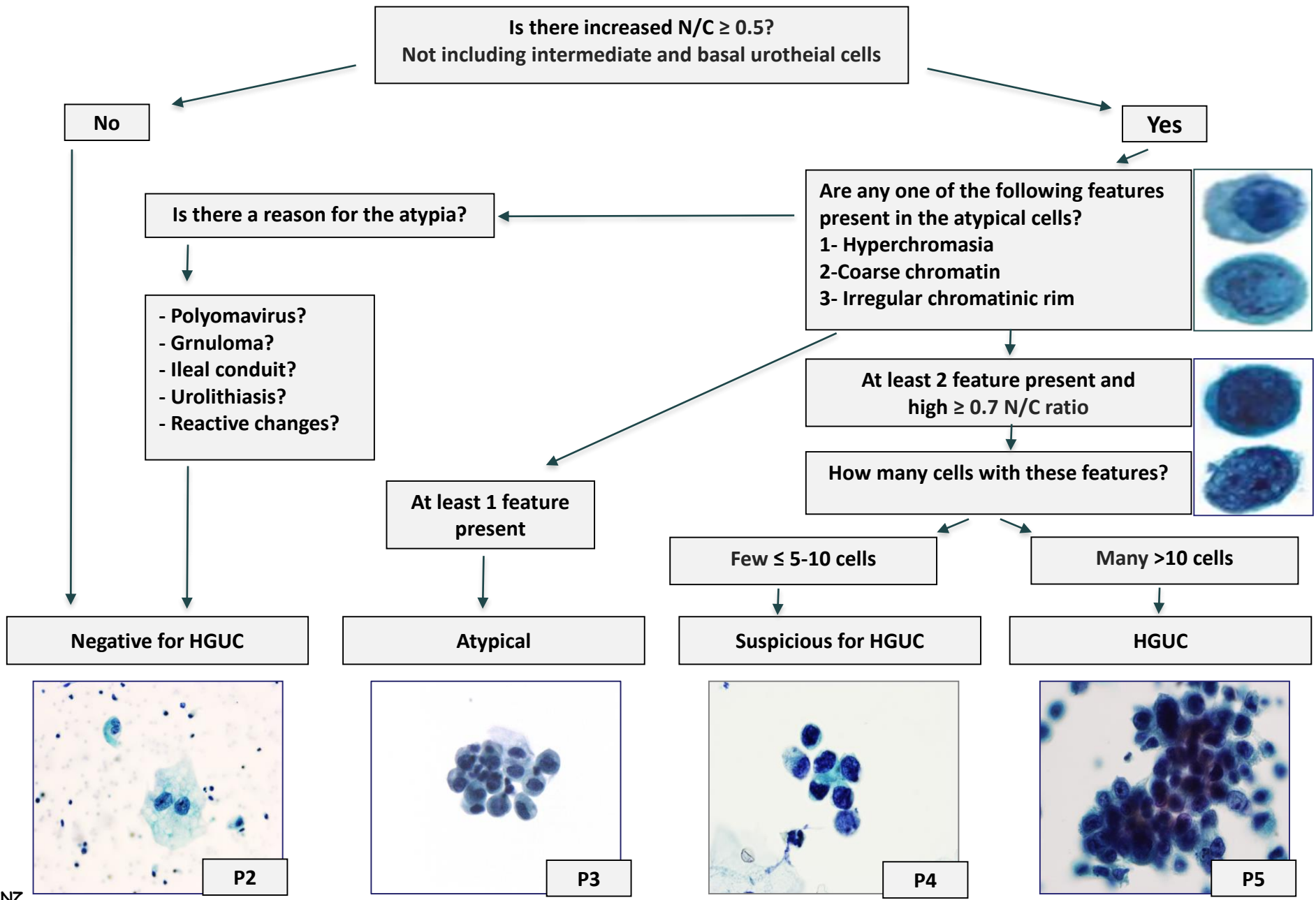
Paris 6 - Maligna celler av annan typ av malignitet, specificera om möjligt.

Allt som bedöms som reaktivt pga inflammation, svamp eller behandling besvaras som Paris 2.

Skivepitelatyper, körtelcellsatyper och oklara atypier (skall undvikas) faller inom Paris 6.

Prov som saknar cellinnehåll, labbtekniska problem faller inom ramen för Paris 1.

The Paris system for reporting urinary cytology

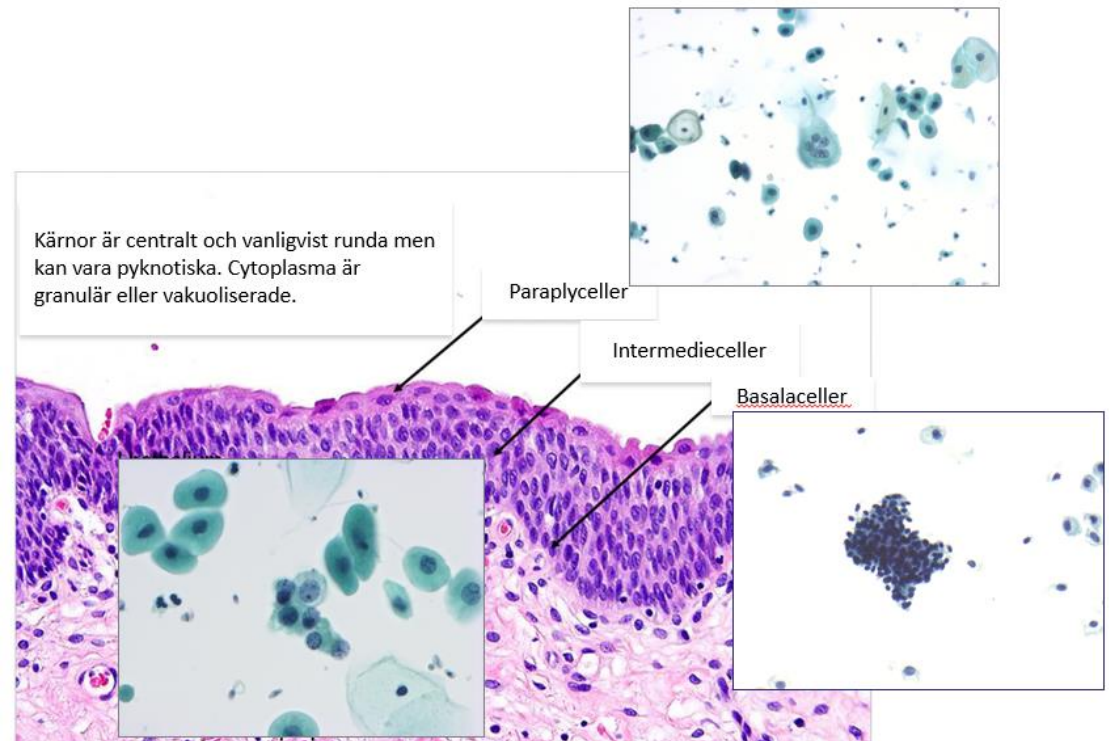


Urinvägarna

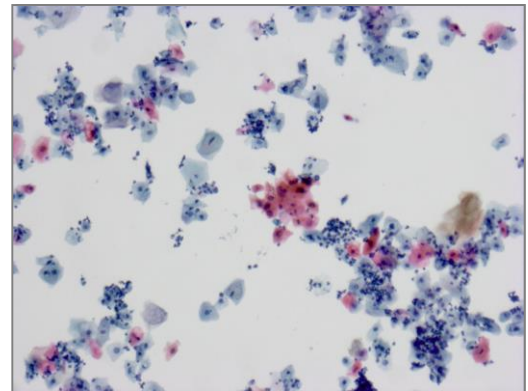
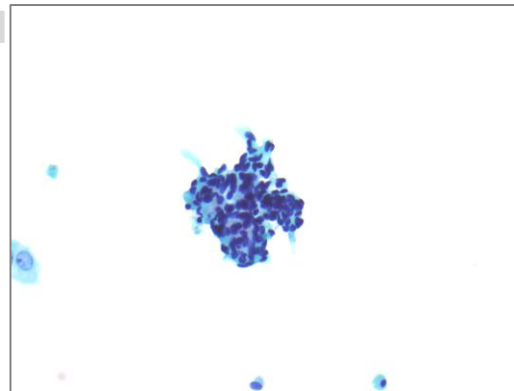
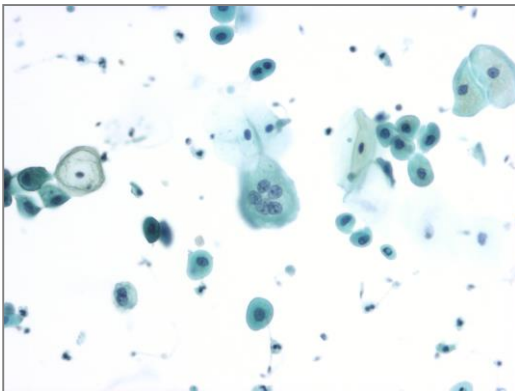
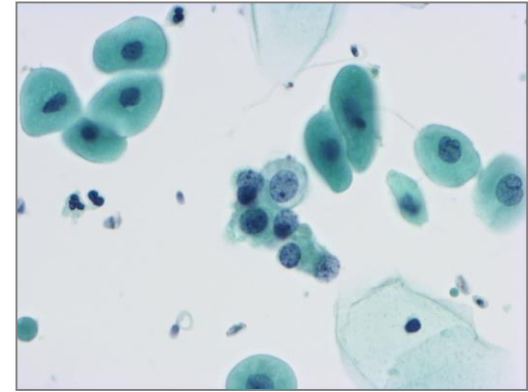
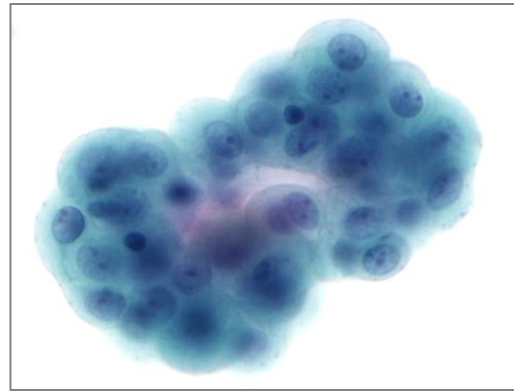
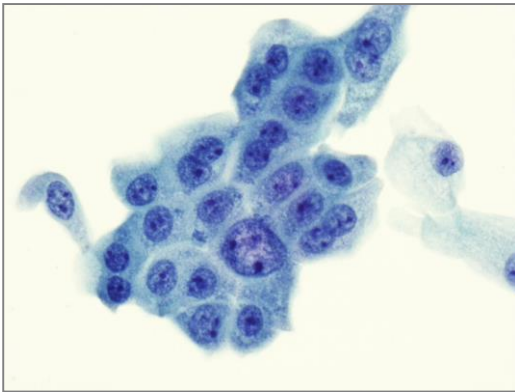
- Urotelceller
 - Basala celler
 - Paraplyceller
 - Skivepitel (Gyn, Trigone)
 - Metaplasi
 - Endometrieceller
 - Inflammatoriska celler
 - Njurceller, Tubuli
 - Cylinderceller
 - *Prostata*
 - *Seminal vesicle*
 - *Cystit*
 - *Gynsfären*
-

Urinvägarna

- Urotelceller
- Basala celler
- Paraplyceller
- Skivepitel (Gyn, Trigone)
- Metaplasi



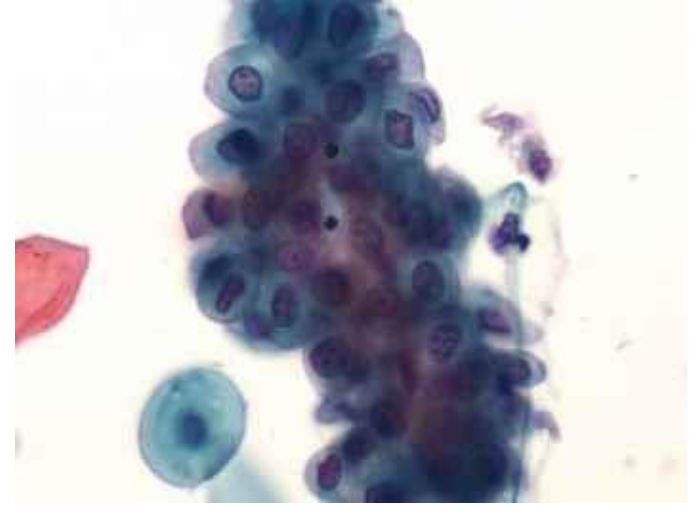
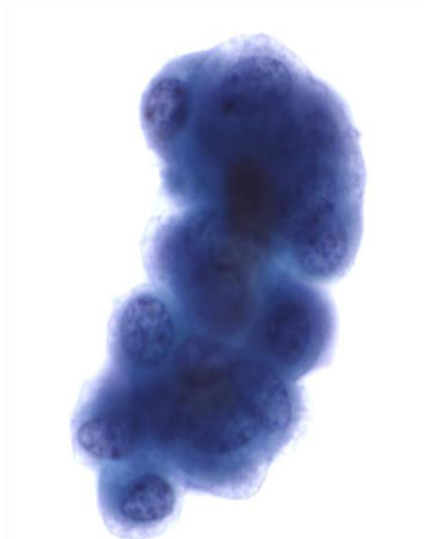
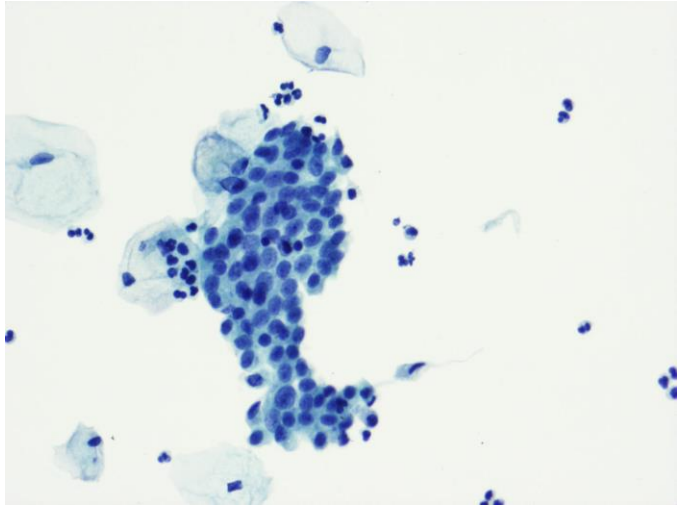
Urinvägarna



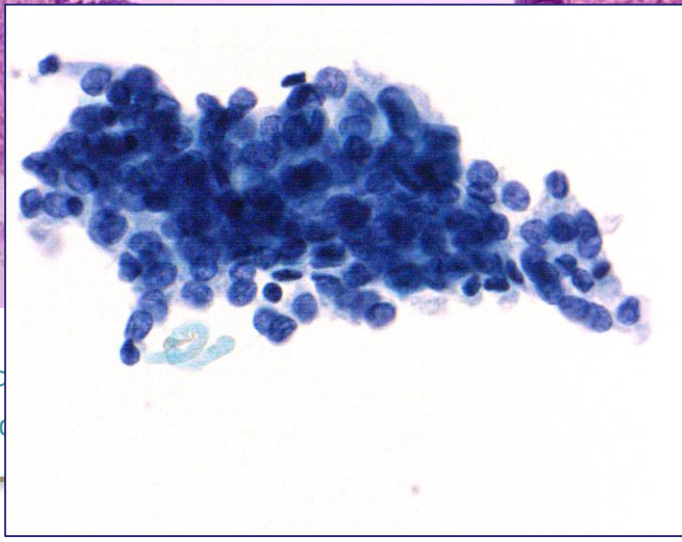
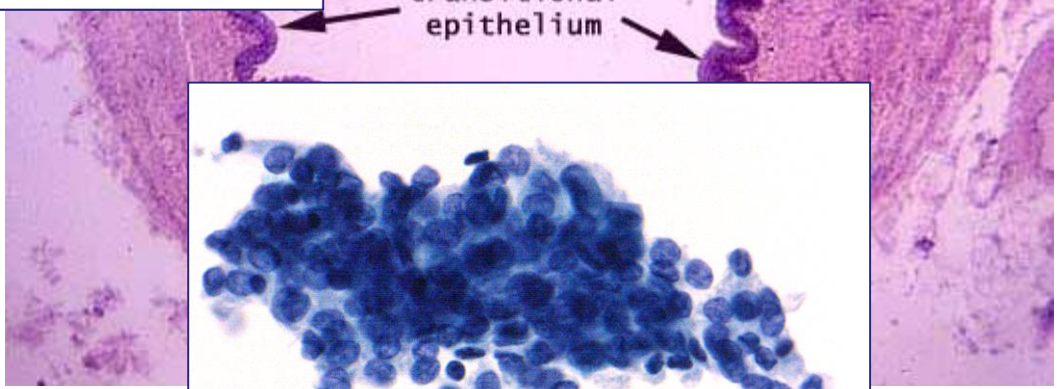
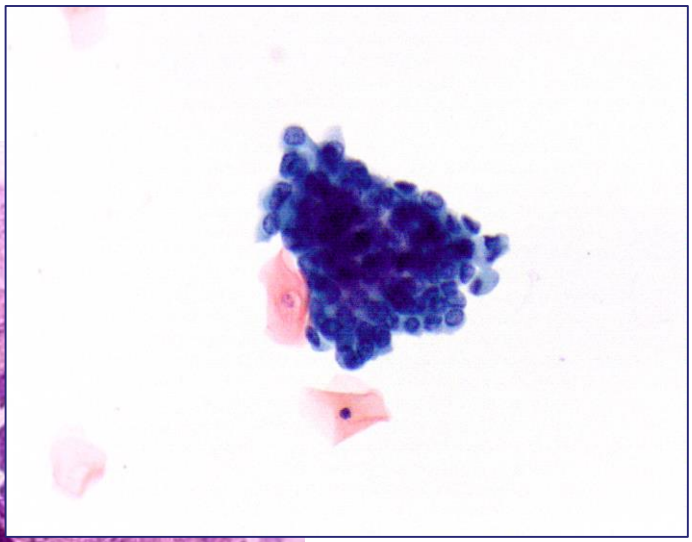
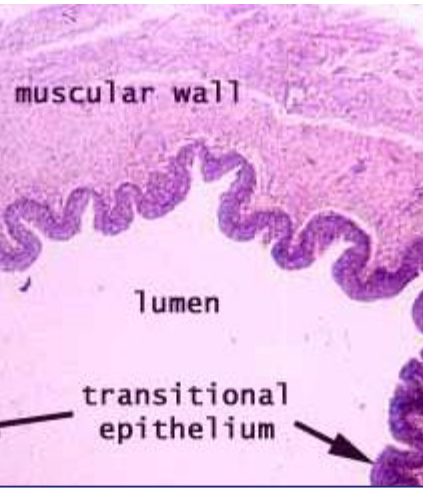
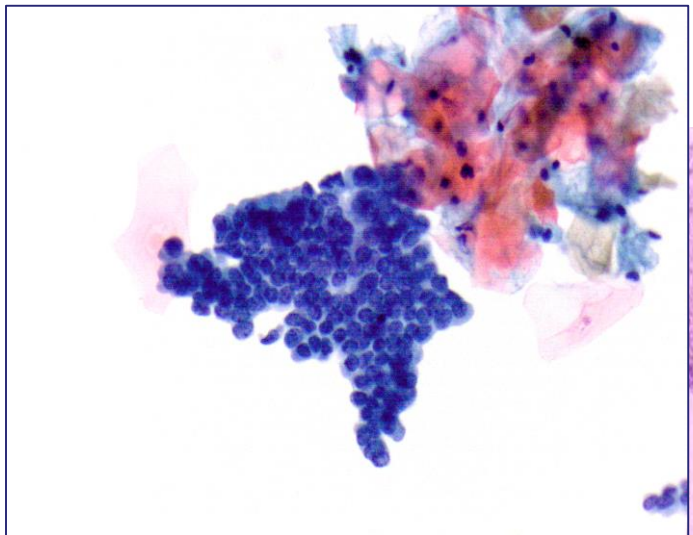
Uroepiteliala grupper

- **Instrumentiell effekt , cystoskopi**
 - **Infektion**
 - **Njursten**
 - **Transitional cell carcinoma (TCC), utvecklas i urinvägarna och kan växa i urinblåsan**
-

Papillära grupper ?

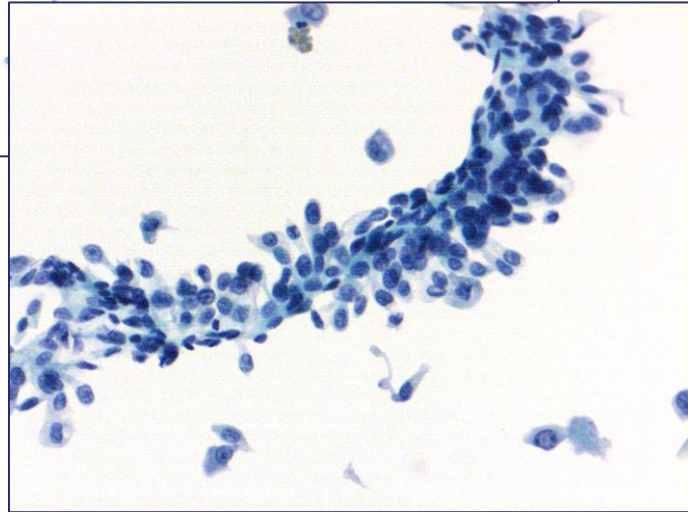
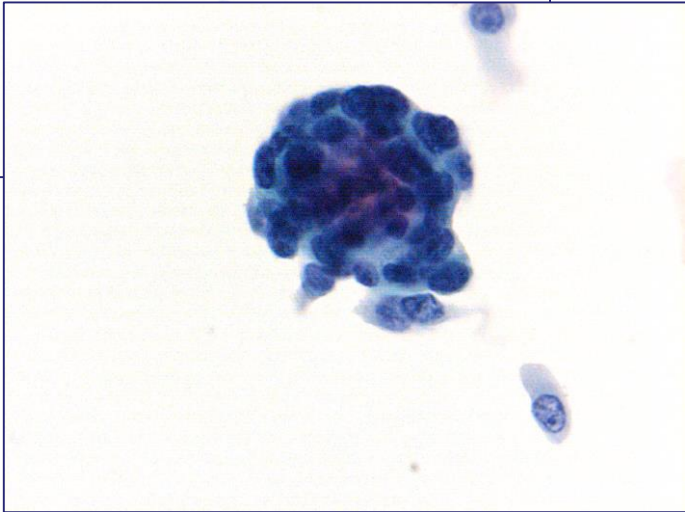
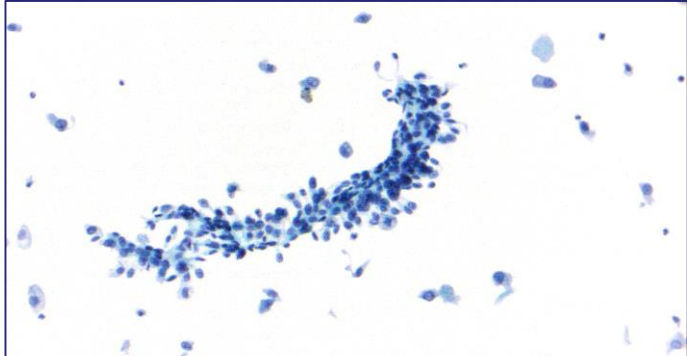
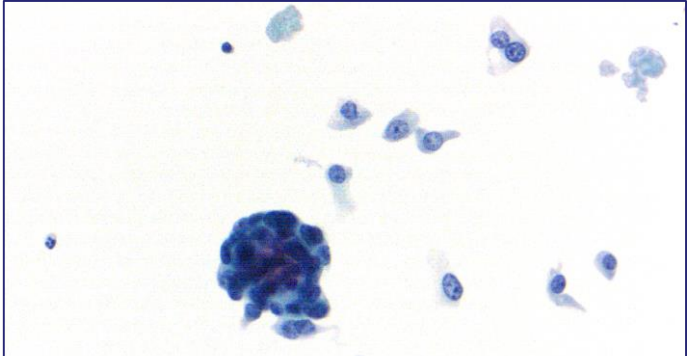


Uretra



<https://radiologykey.com/>
<http://www.siumed.edu/~c>

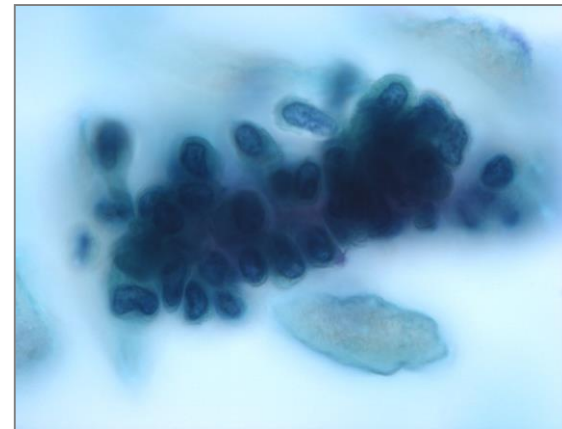
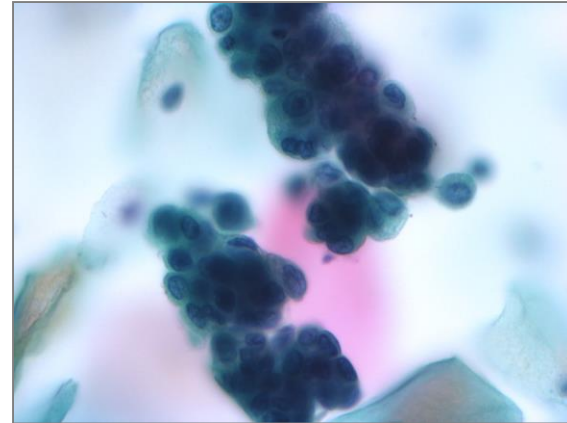
KAD



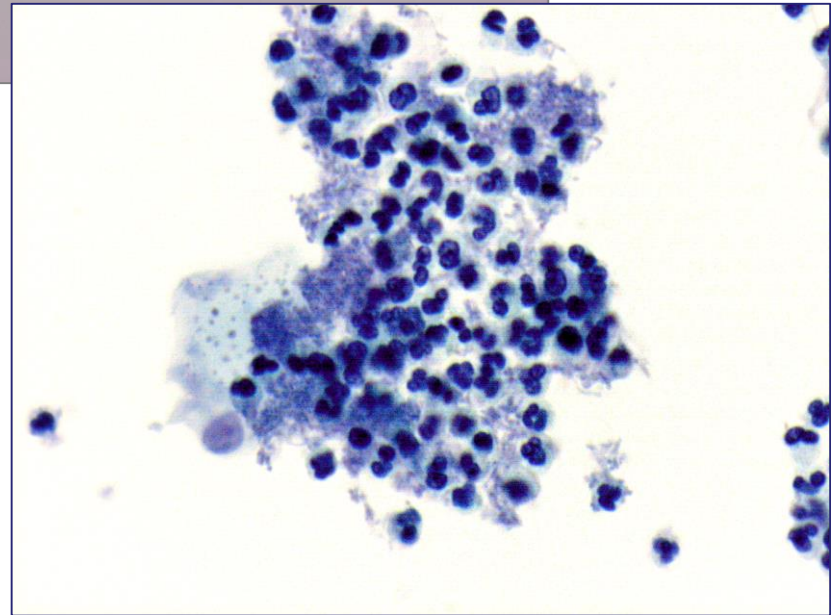
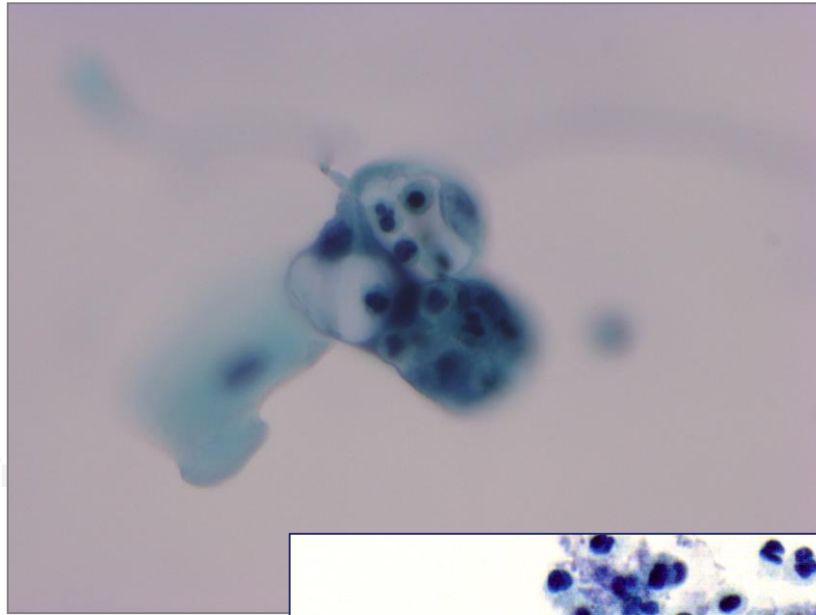
KAD: Reaktiva förändringar.

Urinvägarna

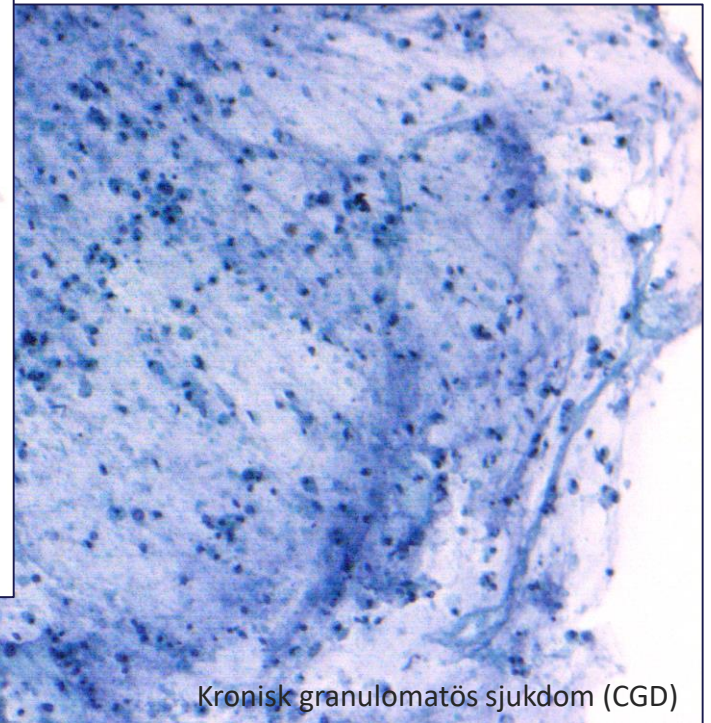
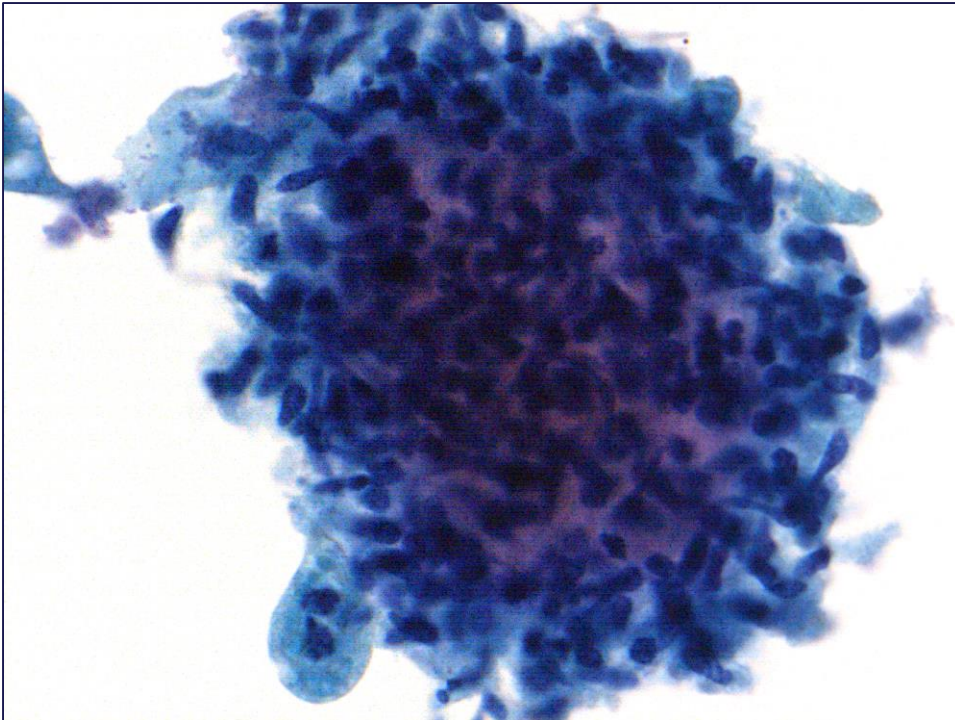
- Urotelceller
- Basala celler
- Paraplyceller
- Skivepitel (Gyn, Trigone)
- Metaplasi
- **Endometrieceller**
- Inflammatoriska celler
- Njurceller, Tubuli
- Cylinderceller
- *Prostata*
- *Seminal vesicle*
- *Cystit*
- *Gynsfären*



- Urotelceller
- Basala celler
- Paraplyceller
- Skivepitel (Gyn, T)
- Metaplasi
- Endometrieceller
- **Inflammatoriska celler**
- Njurceller, Tubuli
- Cylinderceller
 - Prostata
 - Seminal vesicle
 - Cystit
 - Gynsfären



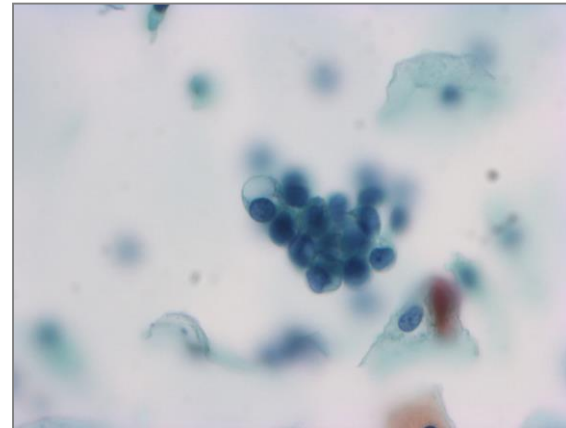
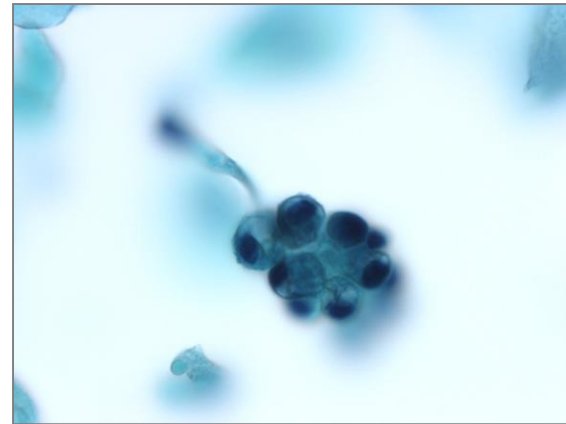
Urinvägarna



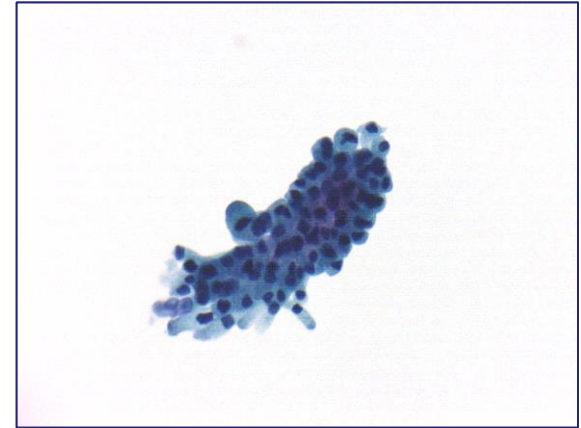
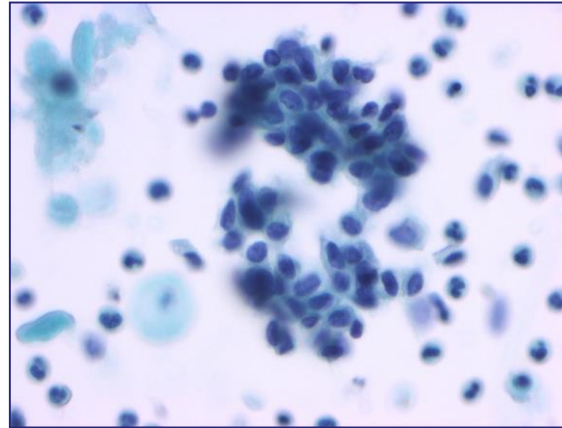
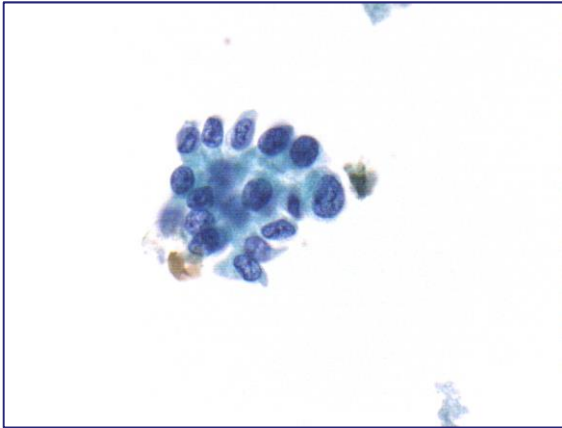
En ärftlig sjukdom som tillhör gruppen primära immunbristsjukdomar. Inflammationerna kan utvecklas till granulom

Urinvägarna

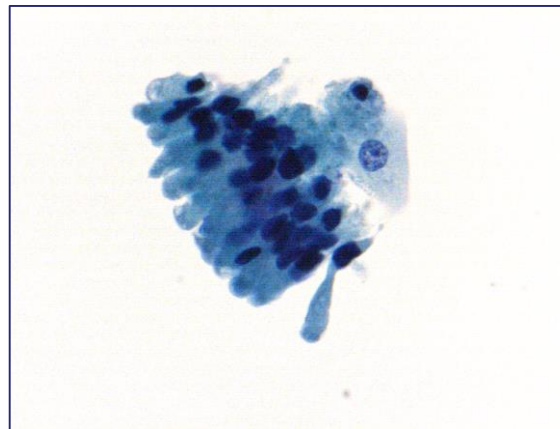
- Urotelceller
- Basala celler
- Paraplyceller
- Skivepitel (Gyn, Trigone)
- Metaplasi
- Endometrieceller
- Inflammatoriska celler
- **Njurceller, Tubuli**
- Cylinderceller
- *Prostata*
- *Seminal vesicle*
- *Cystit*
- *Gynsfären*



Urinvägarna



- Endometrieceller
- Inflammatoriska celler
- Njurceller, Tubuli
- **Cylinderceller**
 - ***Prostata***
 - ***Seminal vesicle***
 - ***Cystit***
 - ***Gynsfären***



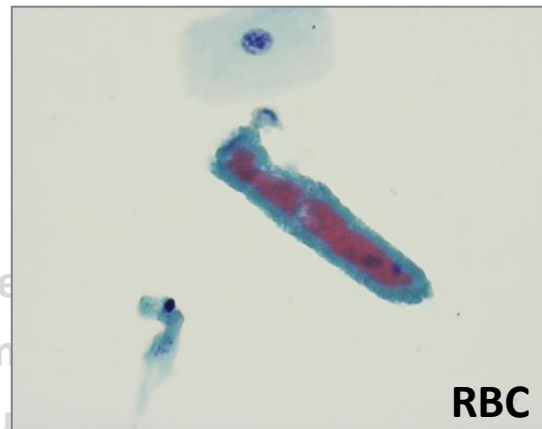
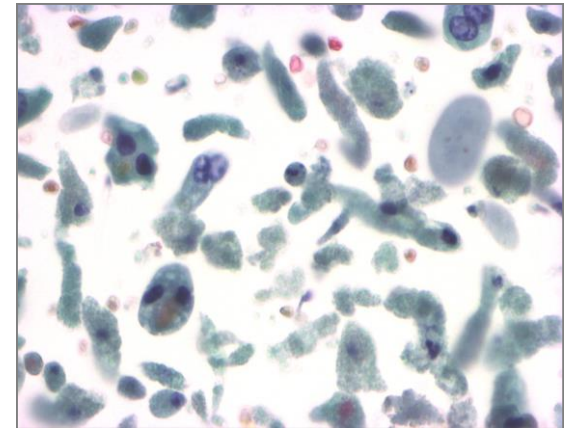
Glandular cells from cystitis glandularis can occasionally be identified in urine cytology specimens. They can be columnar or round mucin-secreting cells that recapitulate the appearance of goblet cells in the colorectal tract. Their nuclei are bland with round to ovoid nuclei and exhibit even chromatin distribution.

Övriga element i urin

- **Cylindrar**
 - **Saltkristaller**
 - **Amorfasalter**
 - **Bakterier**
 - **Spermier**
 - **Maskägg**
 - **Alternaria**
 - **Svamp**
 - **Pollen**
 - **Vegetabiliska celler**
 - **Corpora amylacea**
 - **Gel bedövningsmedel / Botox**
 - **Främmande strukturer**
-

Övriga element i urin

- **Cylindrar**
- Saltkristaller
- Amorfalter
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- Vegetariskt olja
- Corpora amylacea
- Gel bedövningsm
- Främmande stru

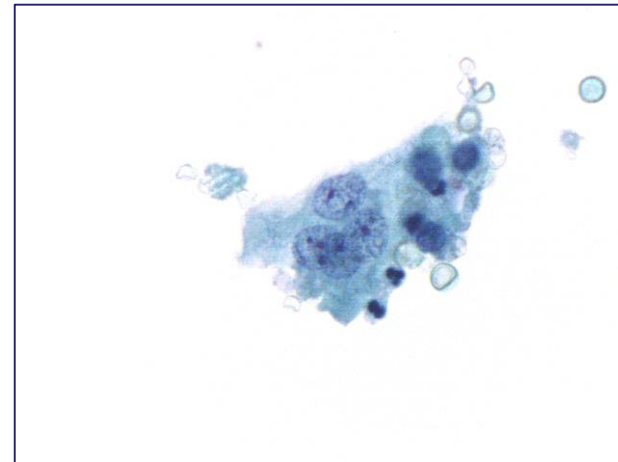
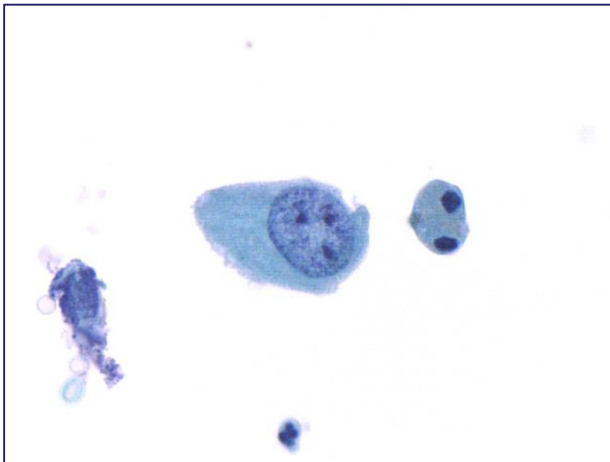
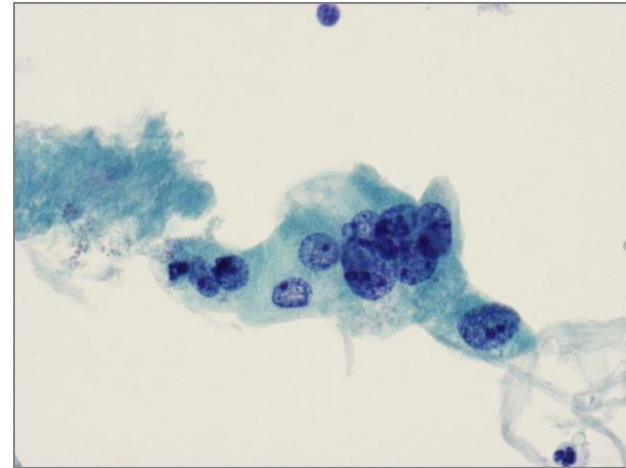


Övriga element i urin

- Cylindrar
 - **Saltkristaller**
 - Amorfosalter
 - Bakterier
 - Spermier
 - Maskägg
 - Alternaria
 - Svamp
 - Pollen
 - Vegetabiliska celler
 - Corpora amylacea
 - Gel bedövningsmedel / Botox
 - Främmande strukturer
-

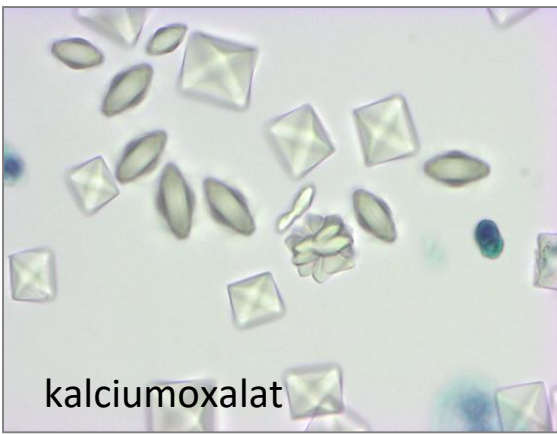
Konkrement

- Kalciumstenar 70–80 %
- Infektionsstenar 10–15 %
- Urinsyrastenar cirka 5 %
- Cystinstenar cirka 1 %

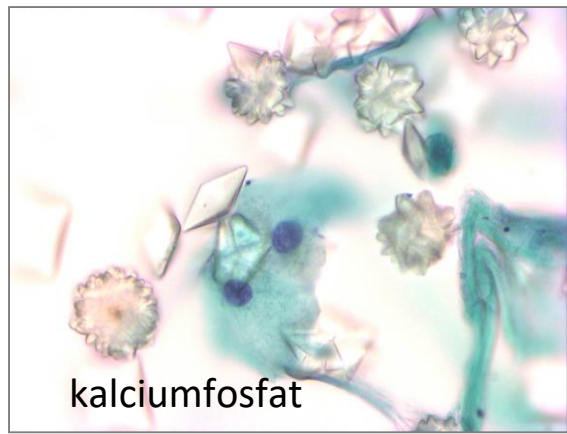


Övriga element i urin

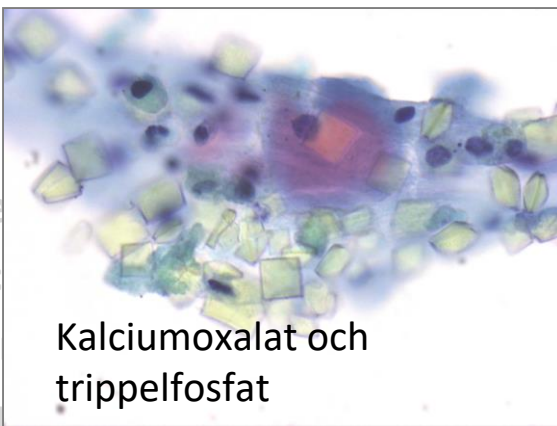
- Cylindrar
- **Saltkristaller**
- Amorfalter
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- Vegetabiliska ce
- Corpora amylac
- Gel bedövnings
- Främmande stru



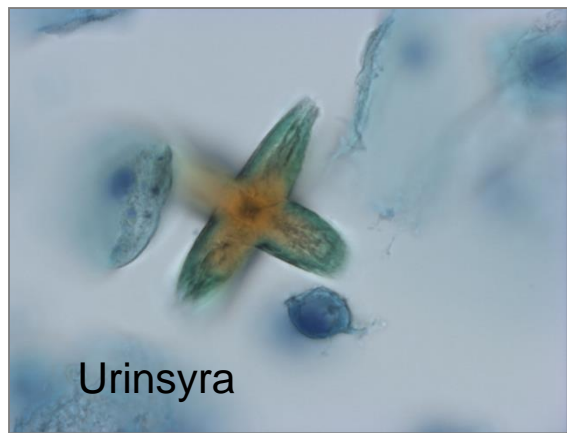
kalciumoxalat



kalciumfosfat



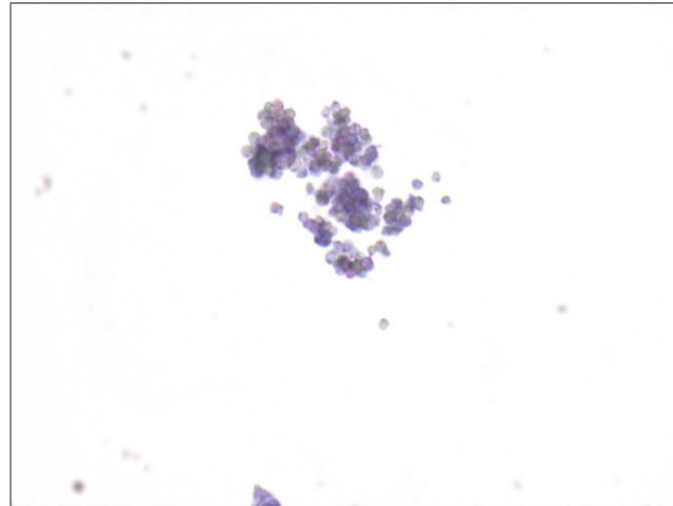
Kalciumoxalat och trippelfosfat



Urinsyra

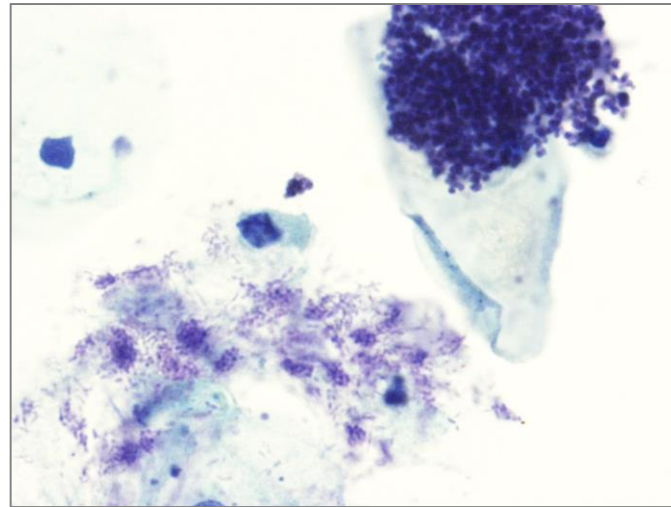
Övriga element i urin

- Cylindrar
- Saltkristaller
- **Amorfosalter**
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- Vegetabiliska celler
- Corpora amylacea
- Gel bedövningsmedel / Botox
- Främmande strukturer



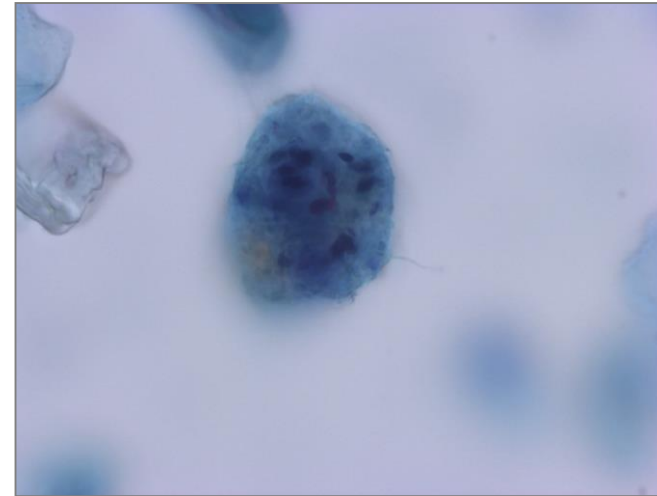
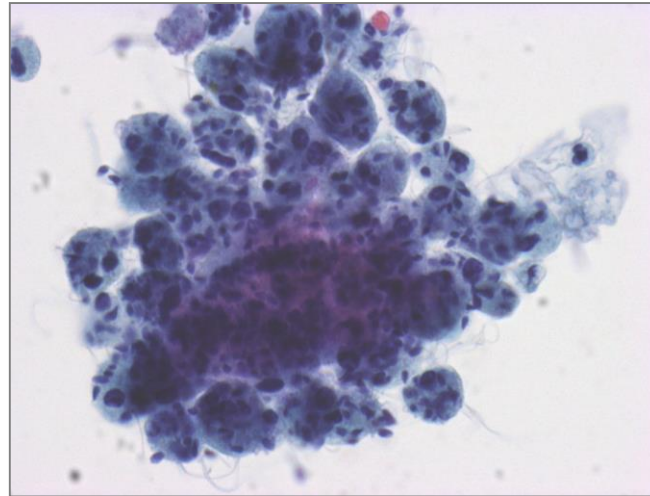
Övriga element i urin

- Cylindrar
- Saltkristaller
- Amorfosalter
- **Bakterier**
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- Vegetabiliska celler
- Corpora amylacea
- Gel bedövningsmedel / Botox
- Främmande strukturer



Övriga element i urin

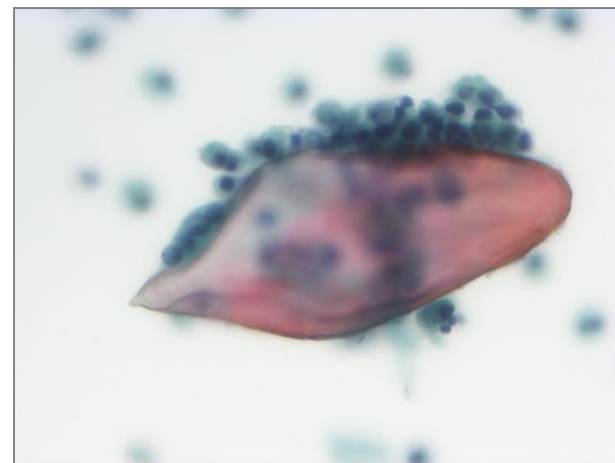
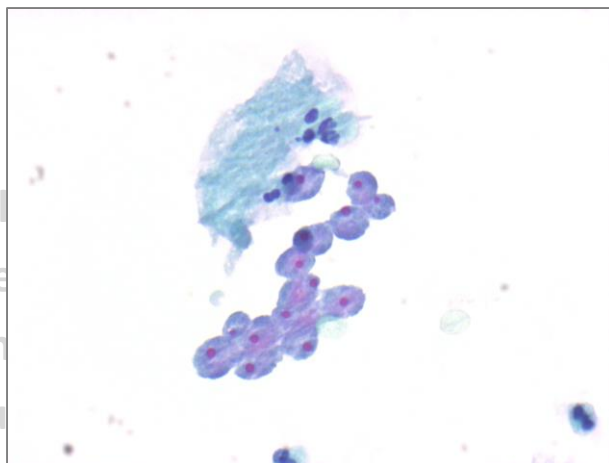
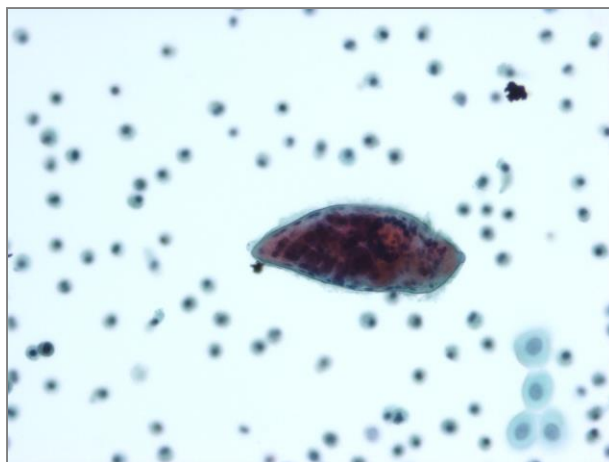
- Cylindrar
- Saltkristaller
- Amorfalter
- Bakterier
- **Spermier**
- Mask ägg
- Alternaria
- Svamp
- Pollen
- Vegetabiliska celler
- Corpora amylacea
- Gel bedövningsmedel / Botox
- Främmande strukturer



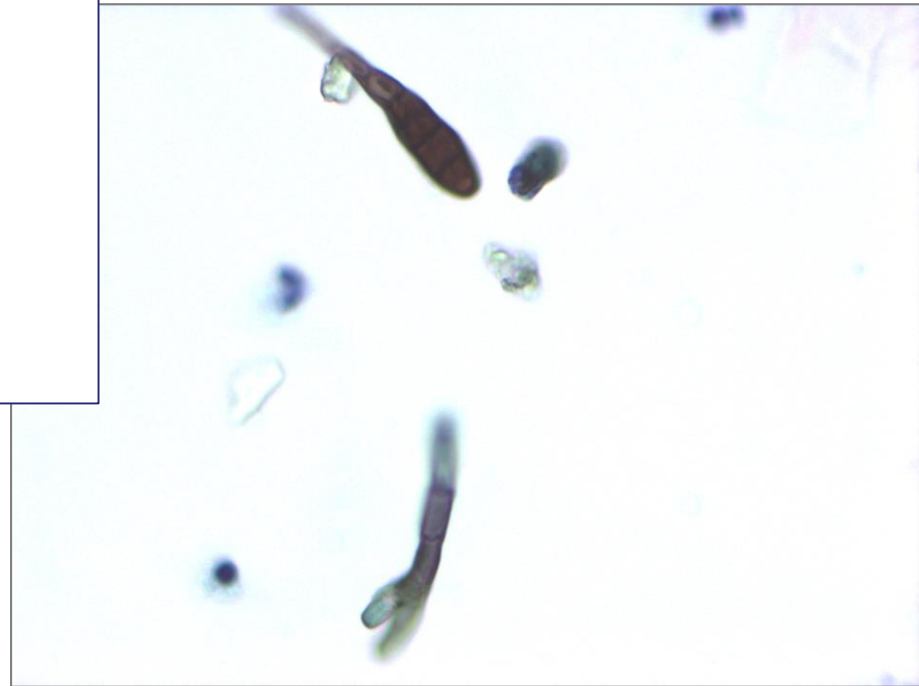
- Biverkningar av vissa läkemedel som används för att behandla högt blodtryck, prostataförstoring och depression
- Nervskador orsakad av ett medicinskt tillstånd, såsom diabetes, multipel skleros, Parkinsons sjukdom eller ryggmärgsskada

Övriga element i urin

- Cylindrar
- Saltkristaller
- Amorfosalter
- Bakterier
- Spermier
- **Maskägg**
- Alternaria
- Svamp
- Pollen
- Vegetabiliska celler
- Corpora amylacea
- Gel bedövningsmedel
- Främmande strukturer



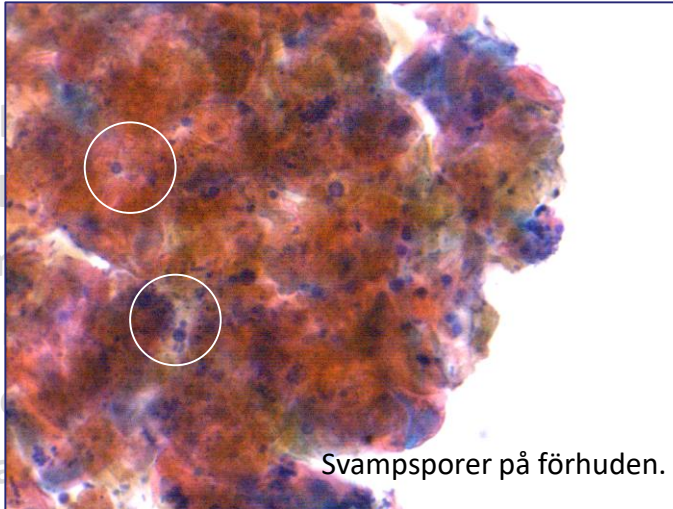
Övriga element i urin



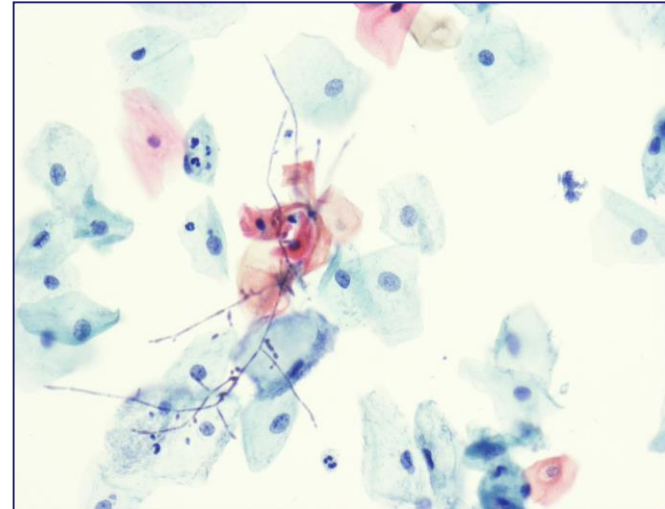
- **Alternaria**
 - Svamp
 - Pollen
 - Vegetabiliska celler
 - Corpora amylacea
 - Gel bedövningsmedel / Botox
 - Främmande strukturer
-

Övriga element i urin

- Cyl
- Sal
- An
- Ba
- Sp
- Ma
- Alternaria
- **Svamp**
- Pollen
- Vegetabiliska celler
- Corpora amylace
- Gel bedövningsmedel / Botox
- Främmande strukturer



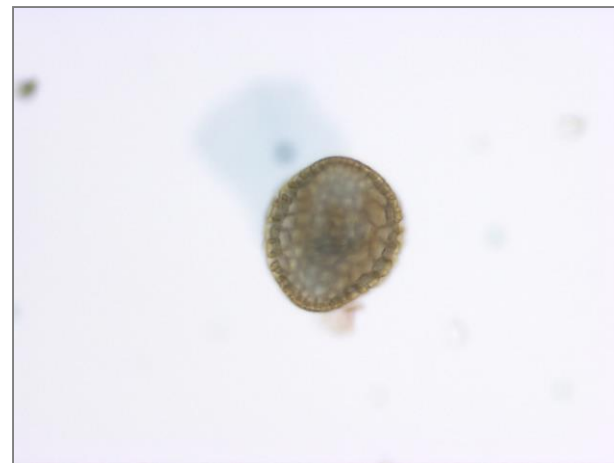
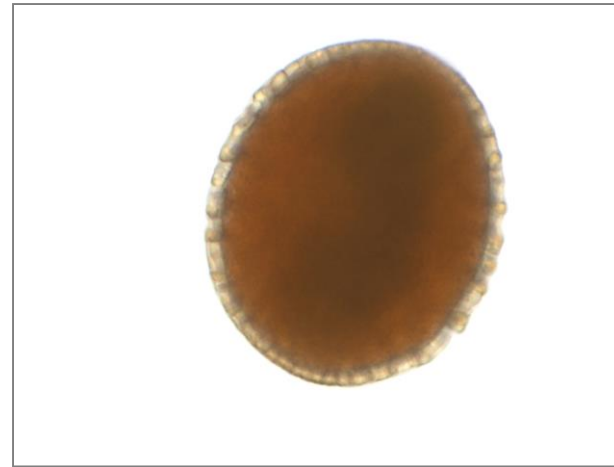
Svampsporer på förhuden.



Förekomst av svamphyfer och sporer. Huruvida detta härstammar från blåsan, kan cytologiskt inte avgöras.

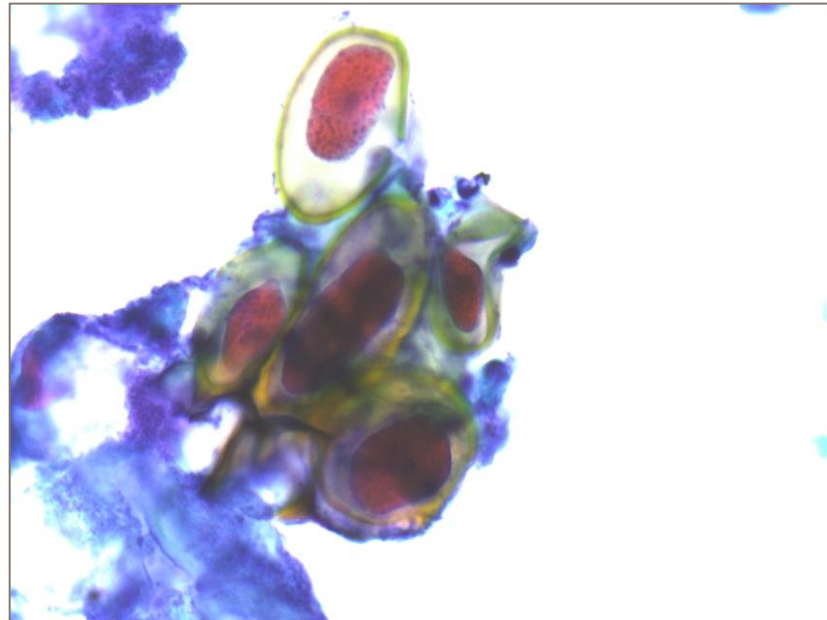
Övriga element i urin

- Cylindrar
- Saltkristaller
- Amorfosalter
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- **Pollen**
- Vegetabiliska celler
- Corpora amylacea
- Gel bedövningsmedel / Botox
- Främmande strukturer

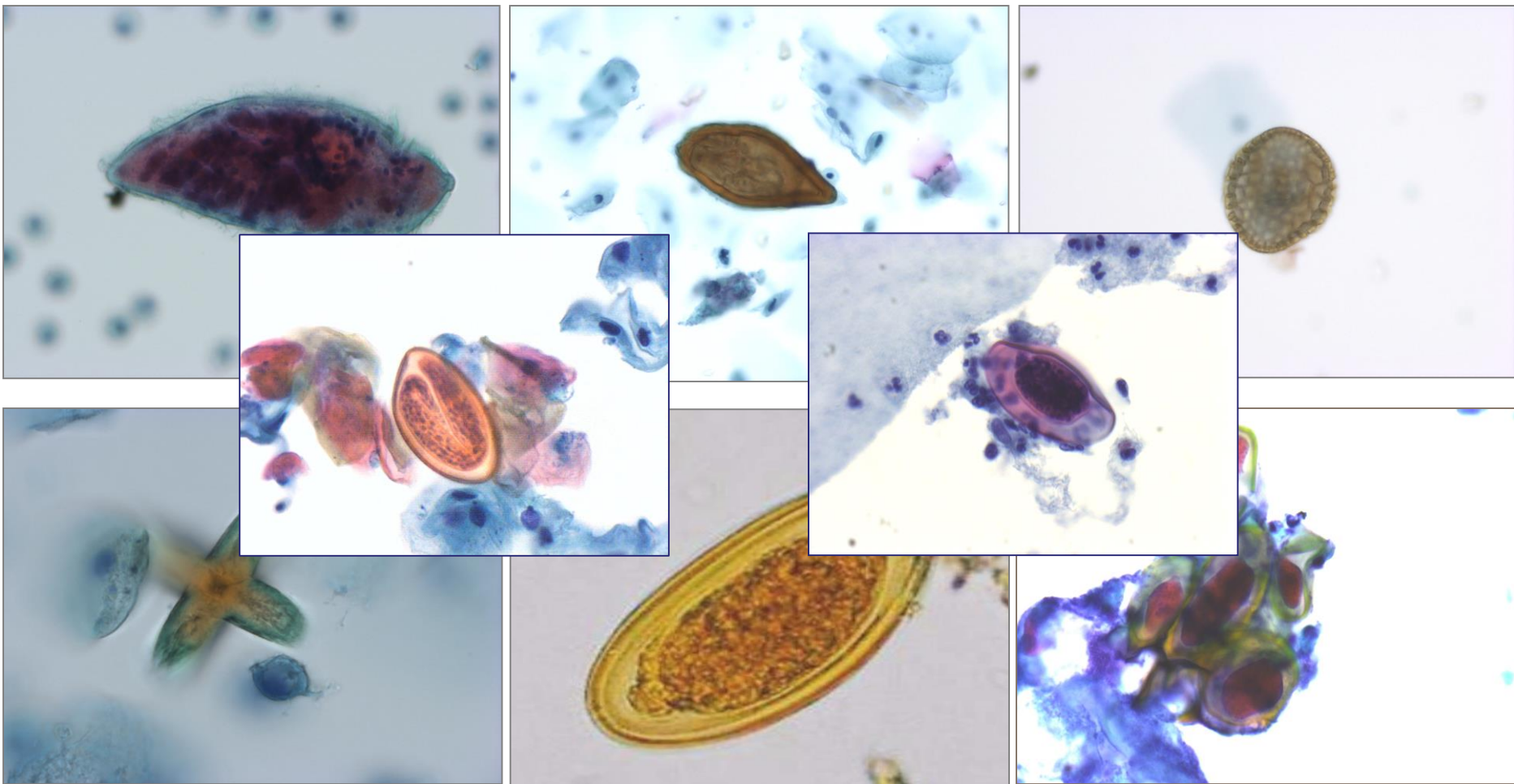


Övriga element i urin

- Cylindrar
- Saltkristaller
- Amorfalter
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- **Vegetabiliska celler**
- Corpora amylacea
- Gel bedövningsmedel
- Främmande strukturer



Övriga element i urin



Förekomst av schistosoma/capillaria/springmask ägg- liknande element men kan ej styrkas med säkerhet

Övriga element i urin

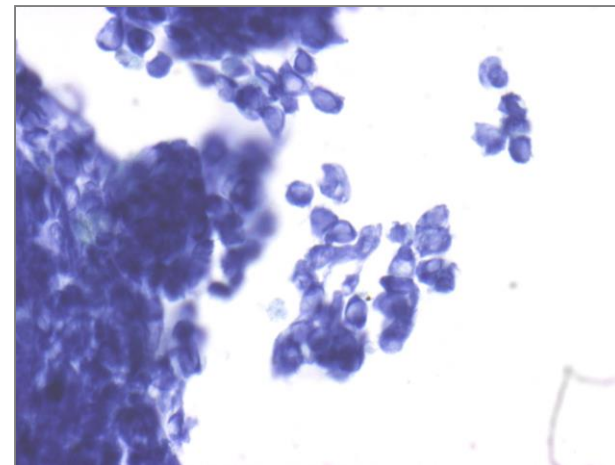
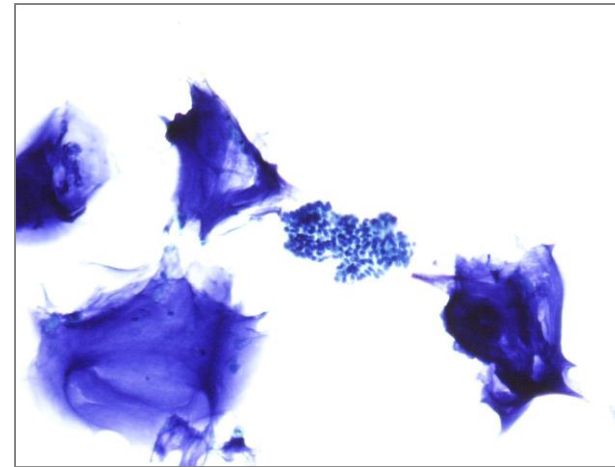
- Cylindrar
- Saltkristaller
- Amorfalter
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- Vegetabiliska celler
- **Corpora amylace**
- Gel bedövningsmedel / Botox
- Främmande strukturer



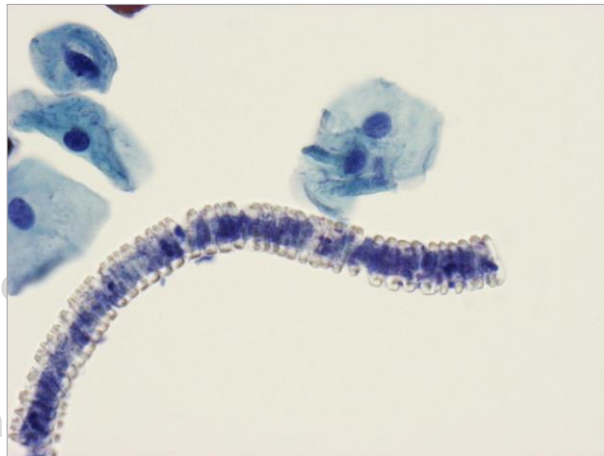
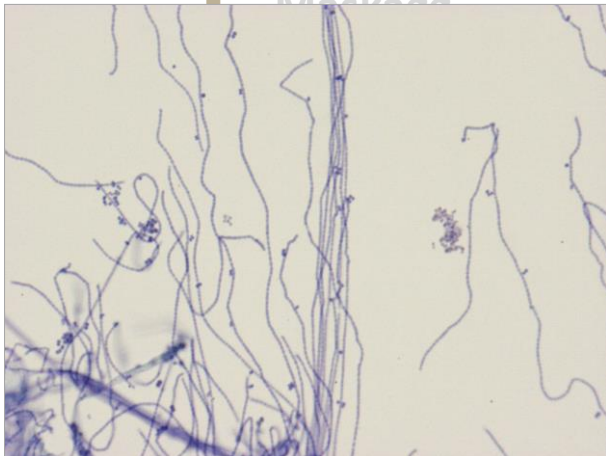
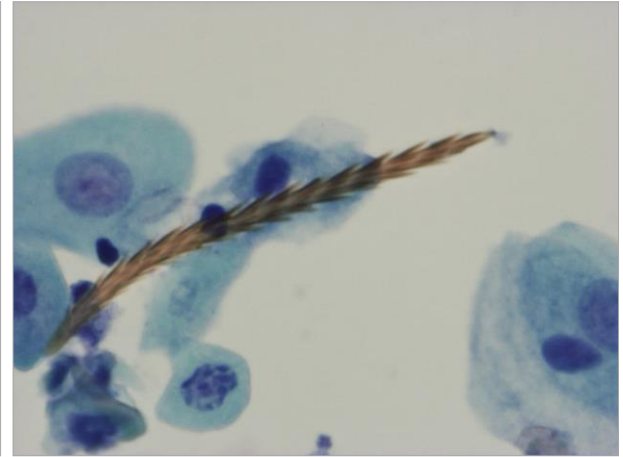
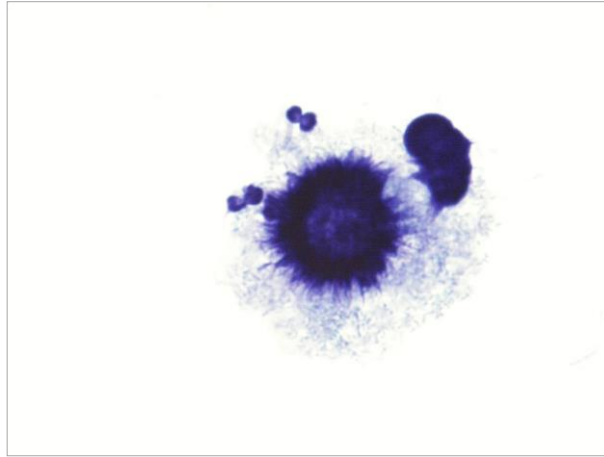
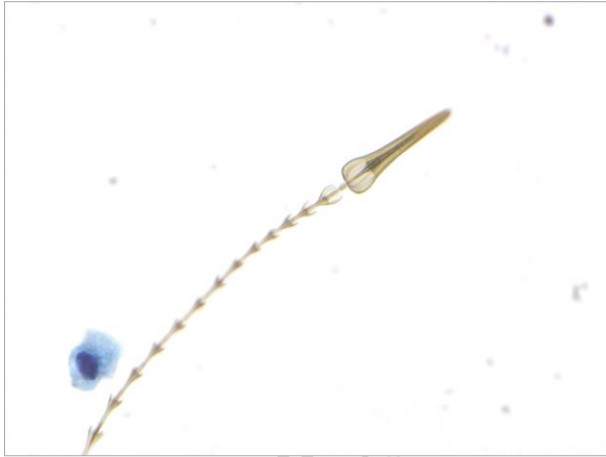
Corpora amylacea in benign prostatic acini are associated with concurrent, predominantly low-grade cancer. [Watchareepohn Palangmonthip^{1,2}](#), [Ruizhe Wu³](#), [Sergey Tarima³](#), [Samuel A Bobholz⁴](#), [Peter S LaViolette⁴](#), [Alexander J Gallan¹](#), [Kenneth A Iczkowski](#)

Övriga element i urin

- Cylindrar
- Saltkristaller
- Amorfosalter
- Bakterier
- Spermier
- Maskägg
- Alternaria
- Svamp
- Pollen
- Vegetabiliska celler
- Corpora amylacea
- **Gel bedövningsmedel / Botox**
- Främmande strukturer



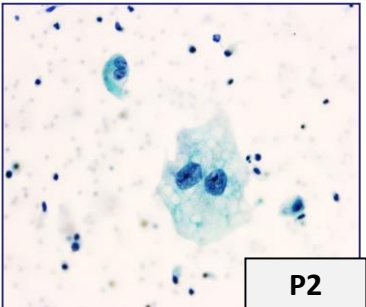
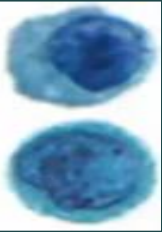
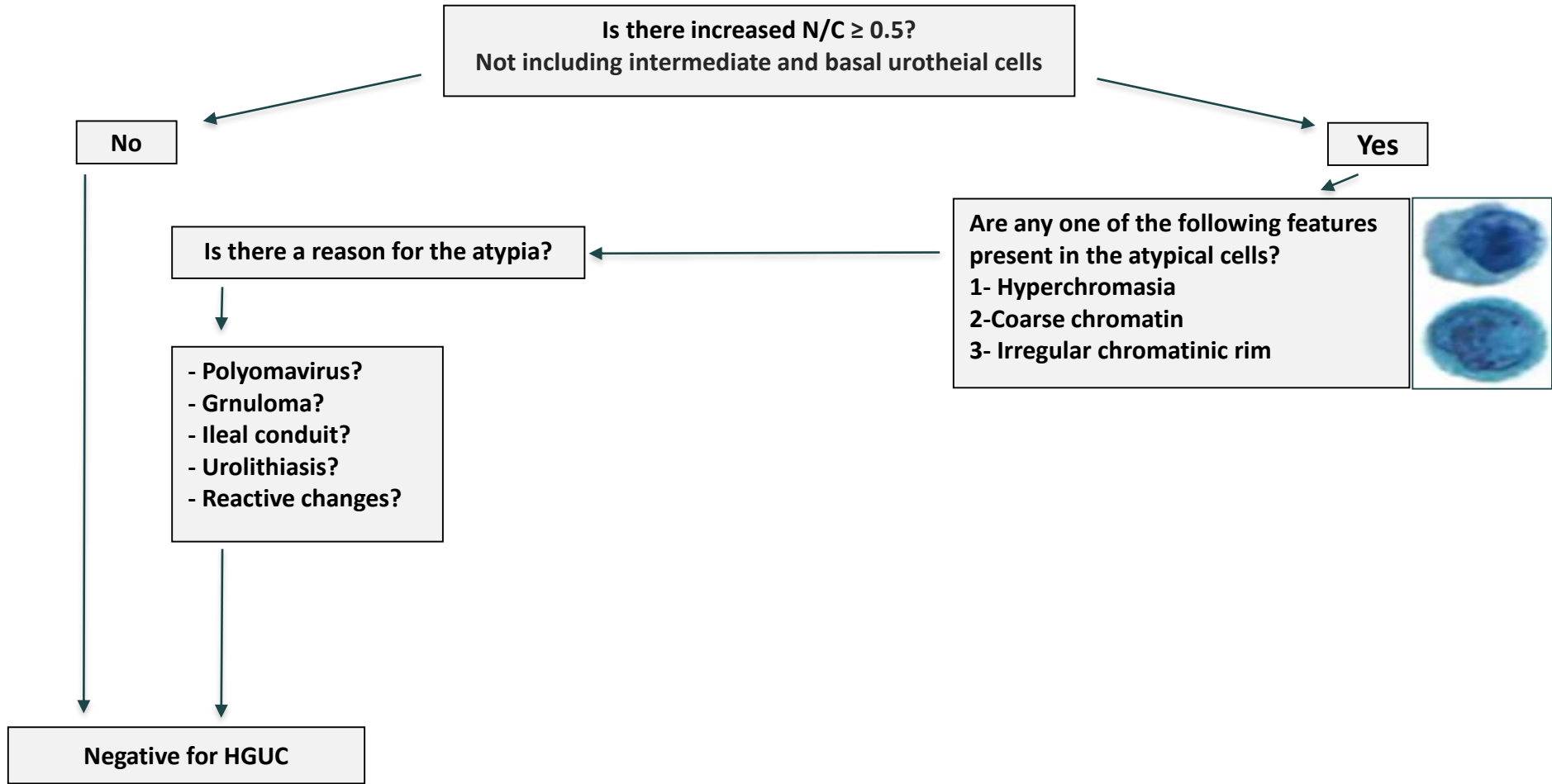
Övriga element i urin



- Främmande strukturer



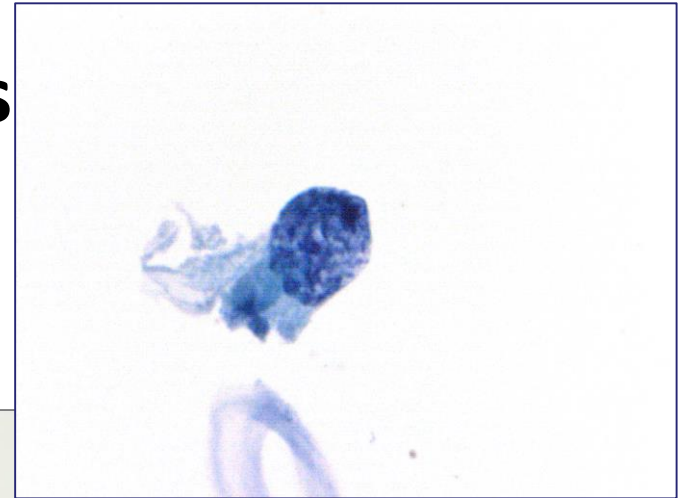
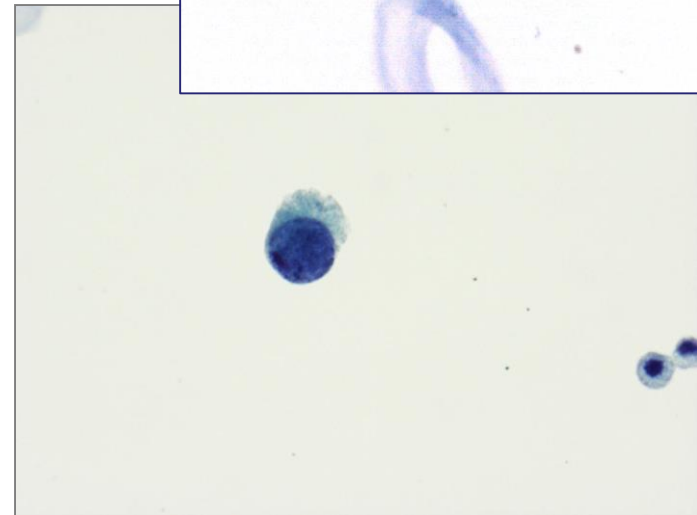
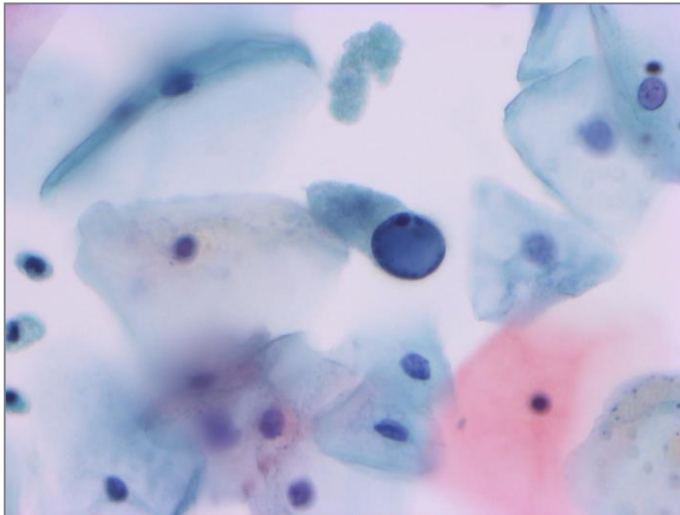
The Paris system for reporting urinary cytology



P2

Polyomavirus

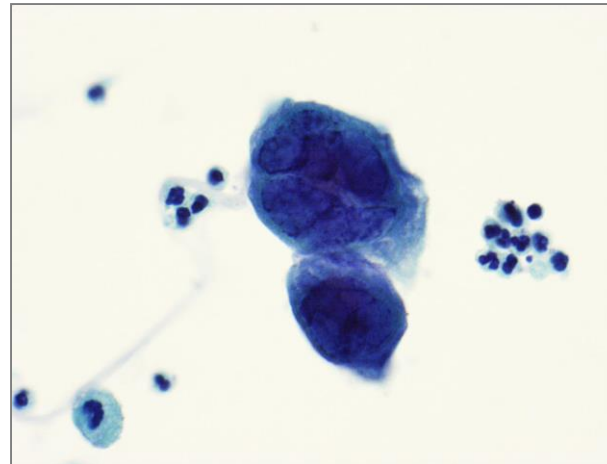
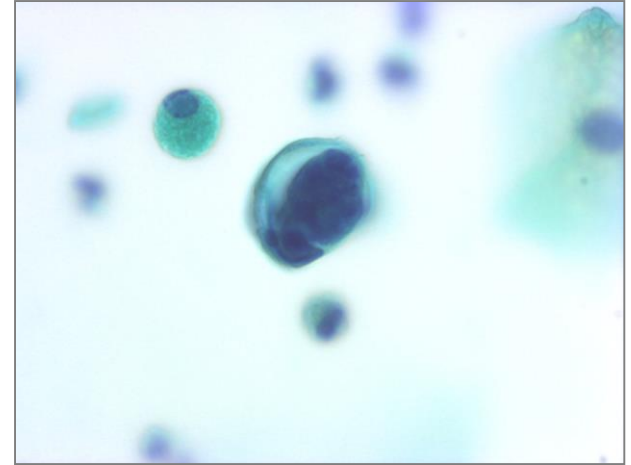
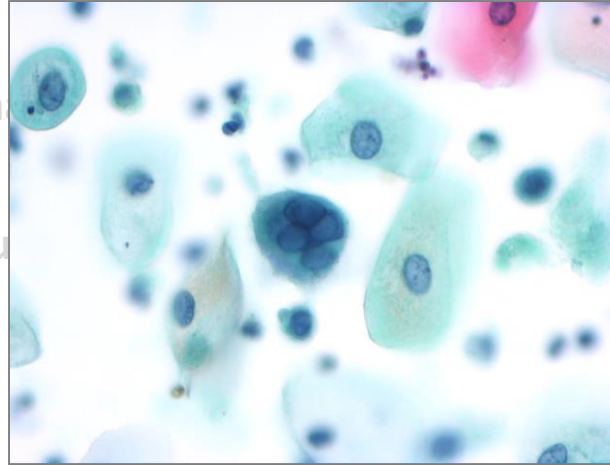
- Human polyomavirus
- Herpes
-
-



Förekomst av isolerade strukturlösa celler, vilket förefaller vara viruspåverkade av typen **Polyomavirus**.

Herpes

- Human polyom
- **Herpes**
- Cytomegaloviru
- Adenovirus



Förekomst av viruspåverkade epitelceller av typen **Herpes**

Cytomegalovirus

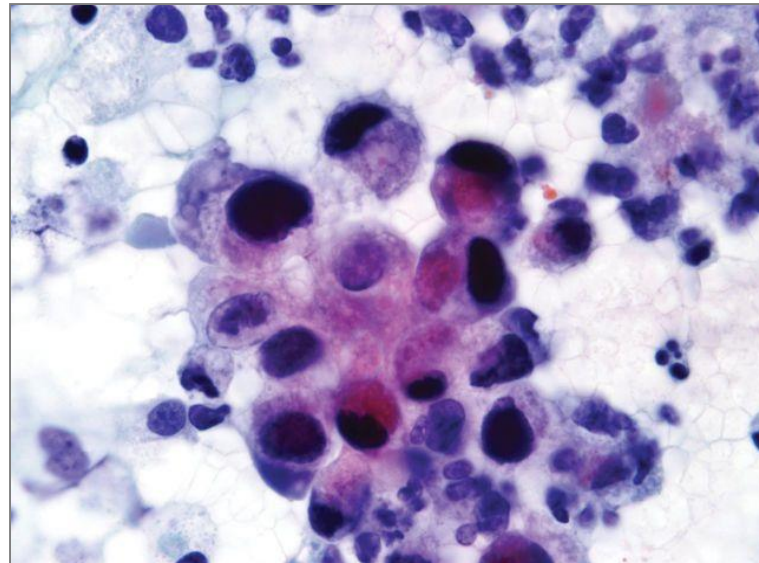
- Human polyomavirus
- Herpes
- **Cytomegalovirus**
- Adenovirus



Cytomegalovirus ses vanligtvis hos nyfödda barn med nedsatt immunitet. Infektionen är vanlig hos vuxna med AIDS (acquired immunodeficiency syndrome). De karakteristiska förändringarna är stora inklusion i kärnan med stora basofila kärninneslutningar omgiven av en stor perifer klarzon ([Abdominal Key Fastest Abdominal Insight Engine](#))

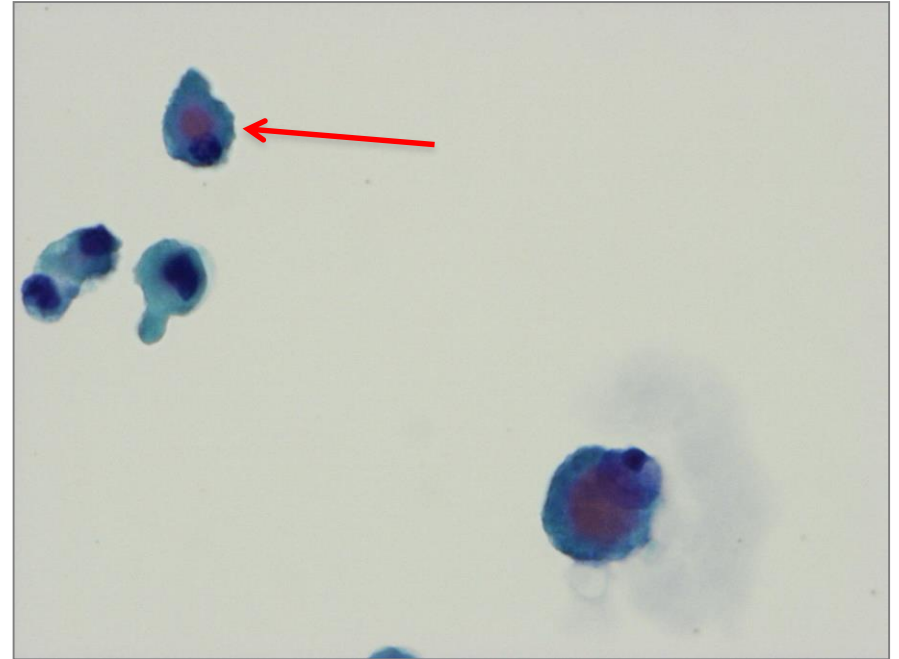
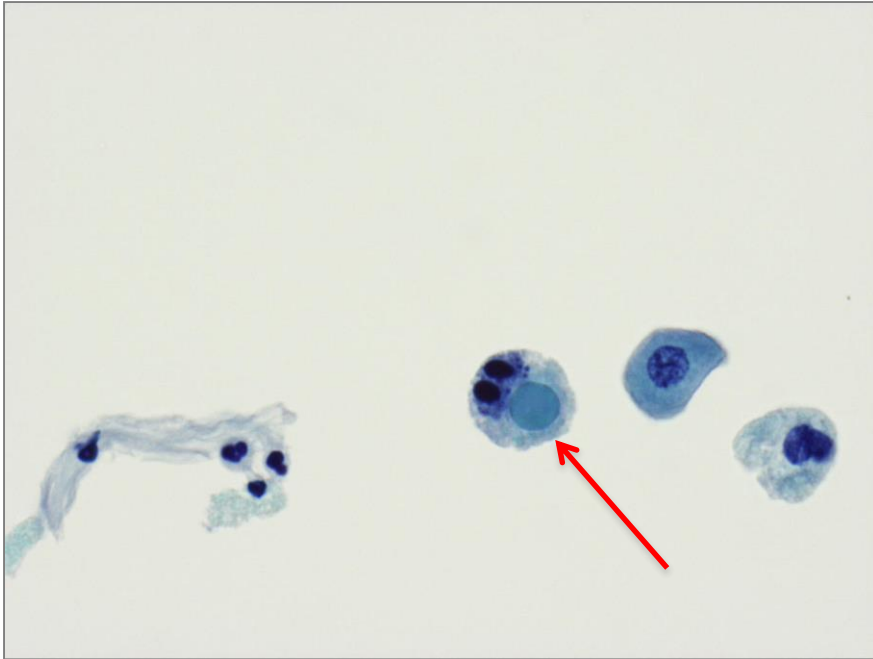
Adenovirus

- Human polyomavirus
- Herpes
- Cytomegalovirus
- **Adenovirus**



Nekros och riklig med inflammatoriska celler

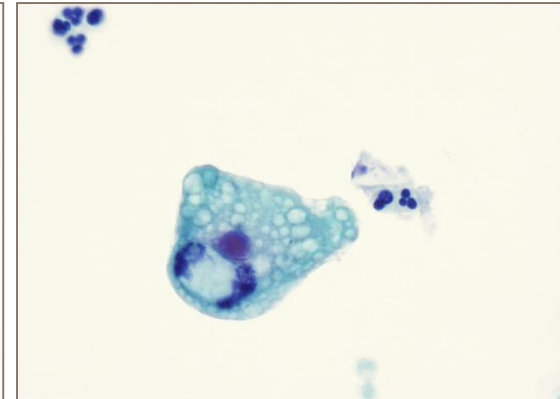
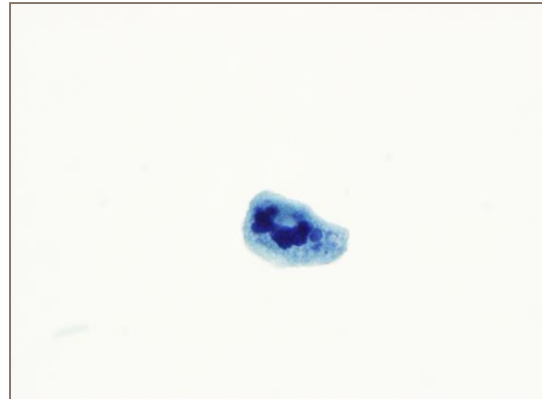
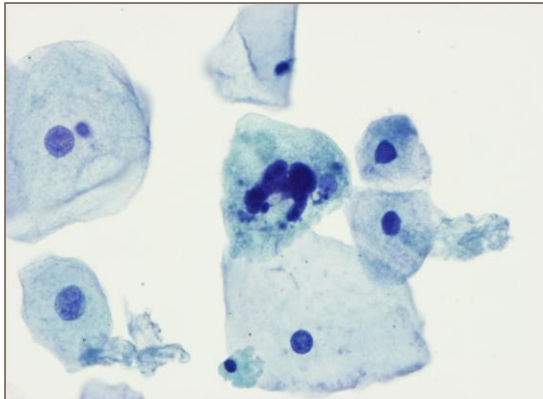
Degeneration



Melamed-Wolinska bodies

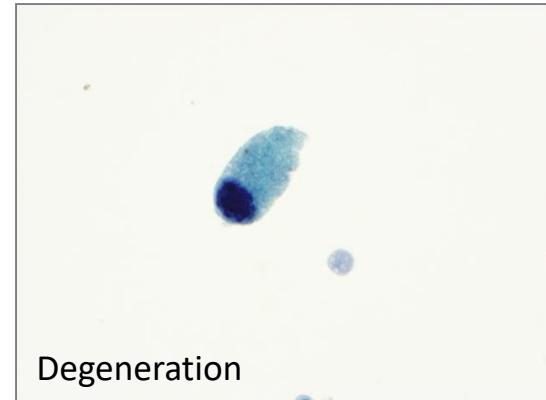
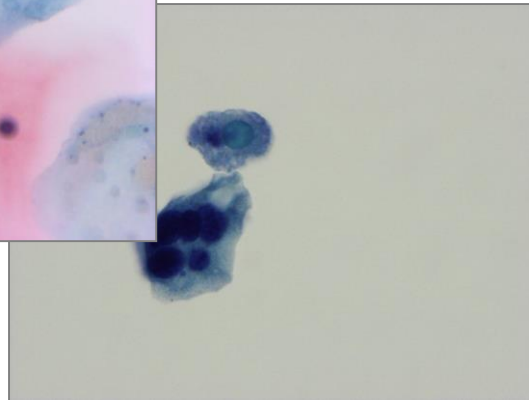
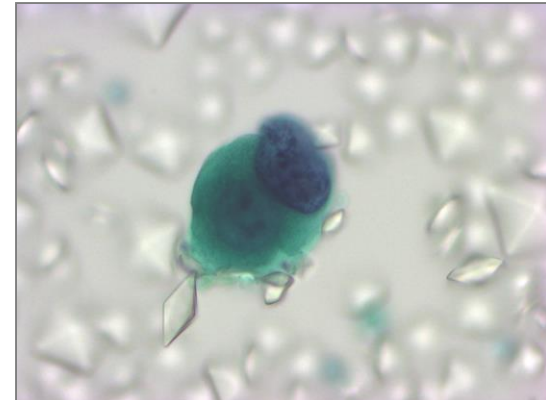
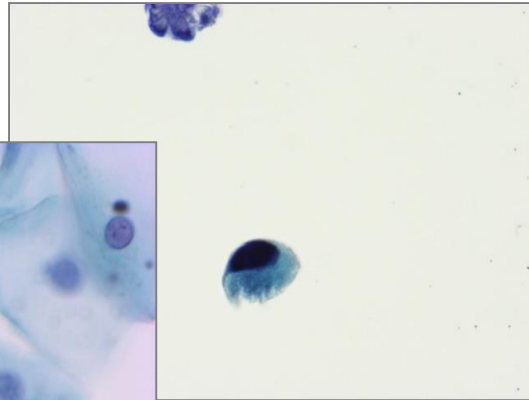
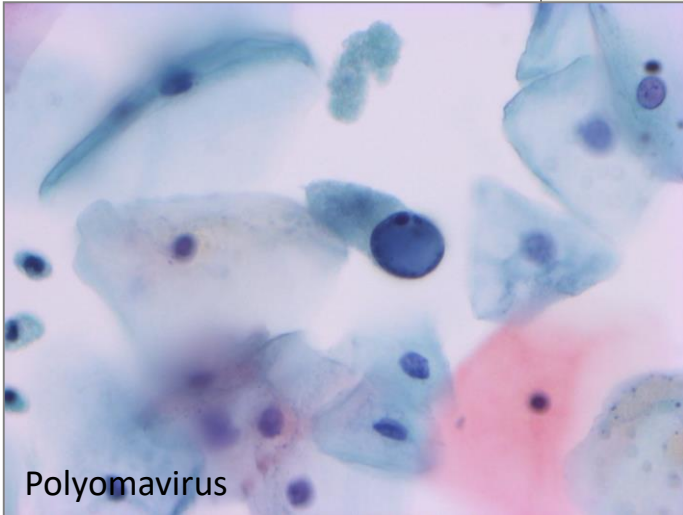
Strålbehandling

- Förändringar kan ses några år efter behandling
- Oftast bubbliga kärna och cytoplasma
- Ofta normal kärn/cytoplasmakvot
- Degeneration

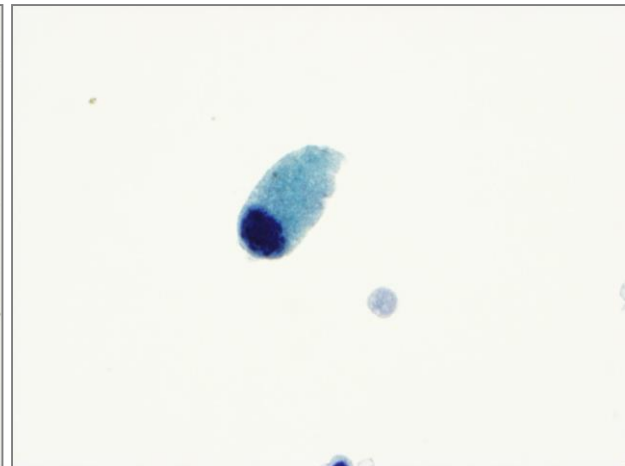
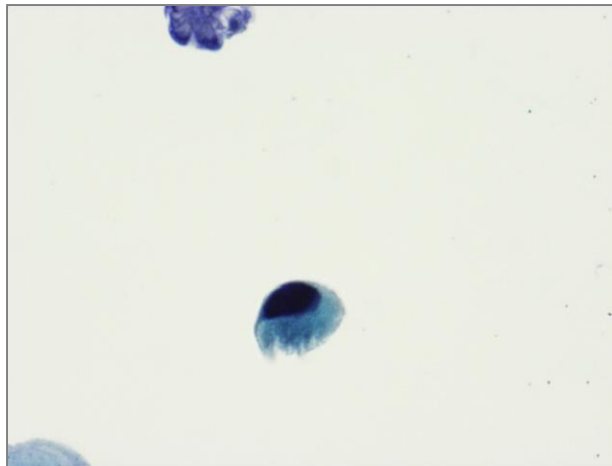
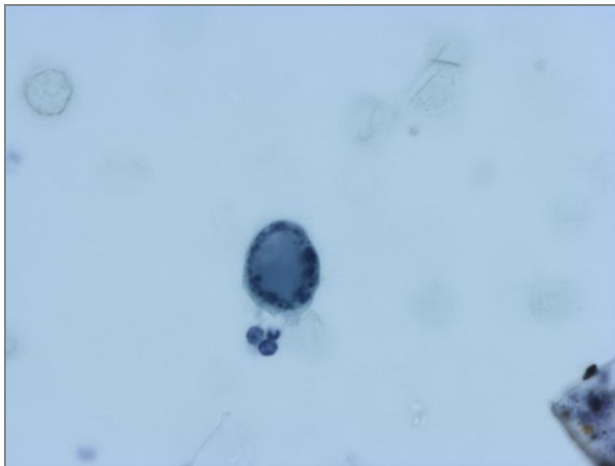
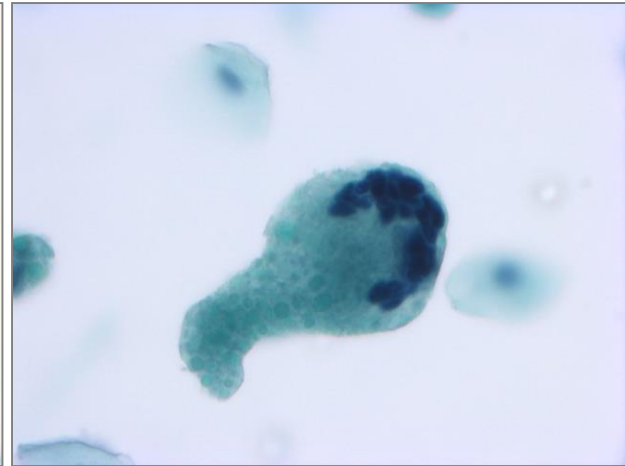
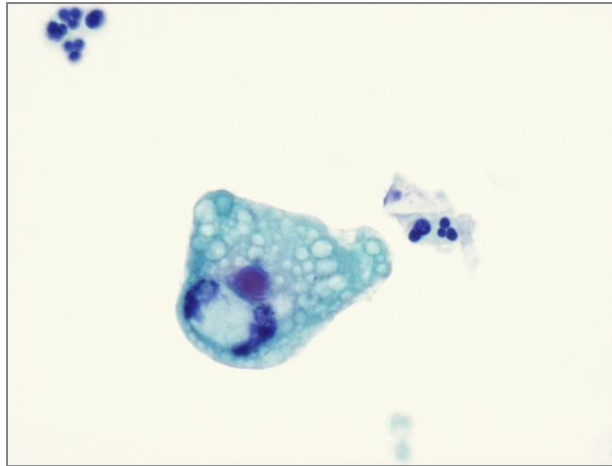
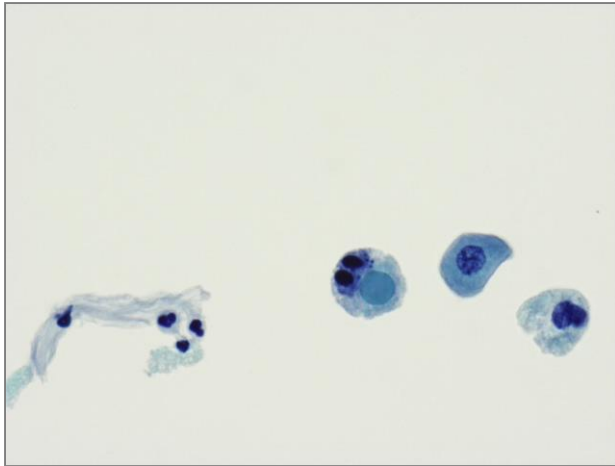


Behandlungseffekt

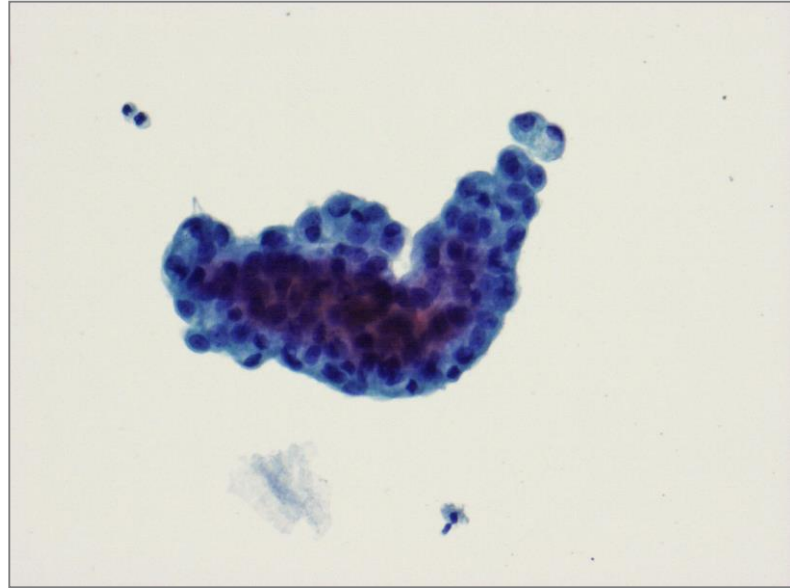
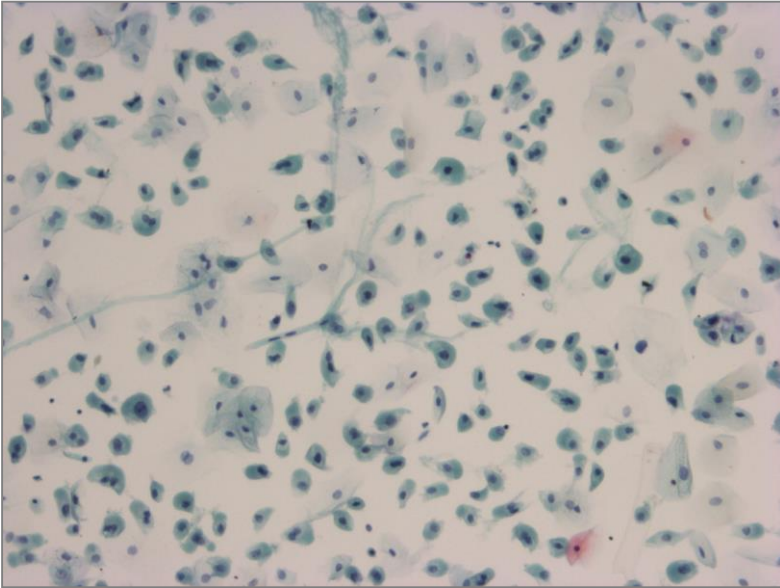
- Bacillus Calmette-Guèrin (BCG)
- Mitomycin



Degeneration

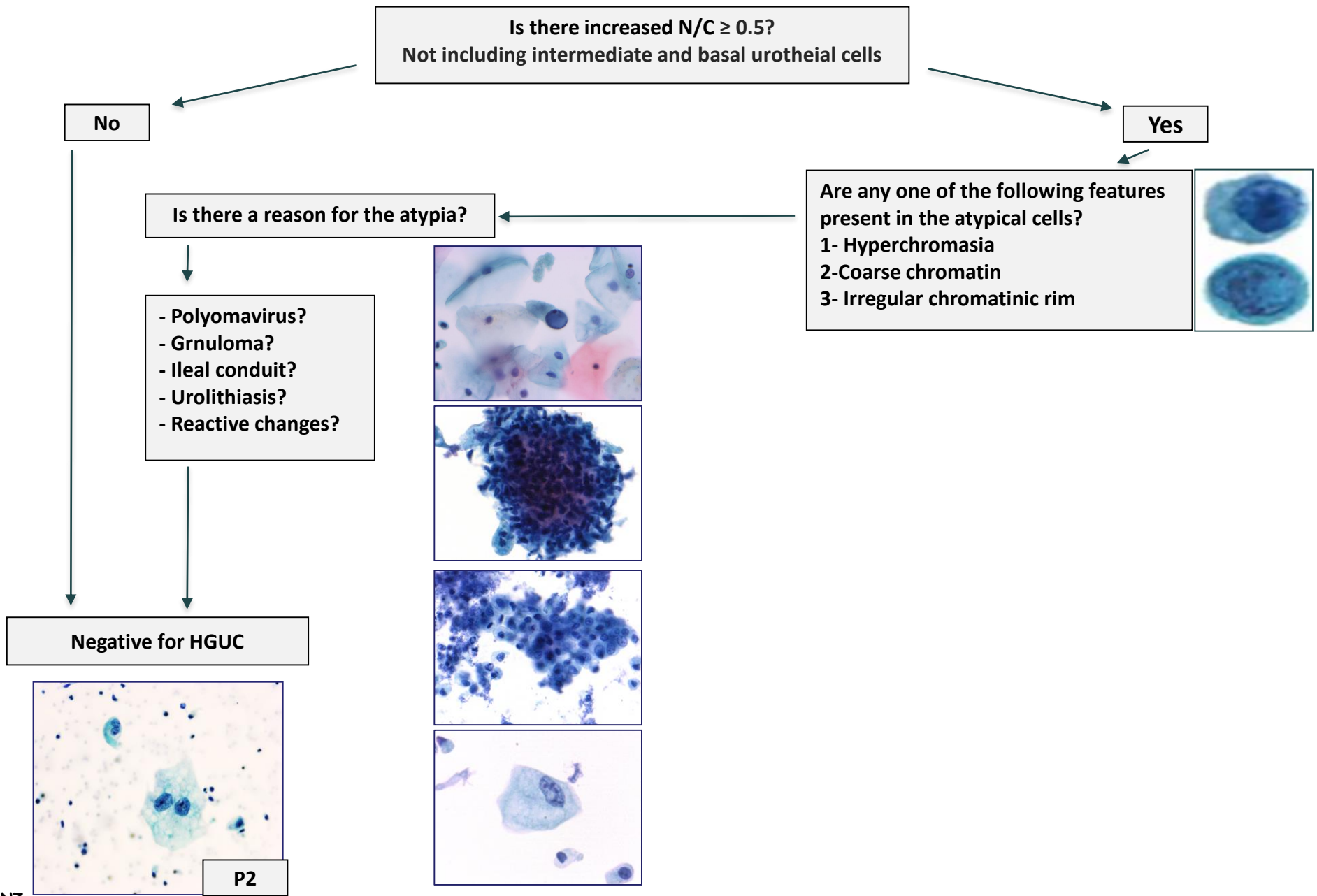


Uroepiteliala grupper och Riklig med urotelceller

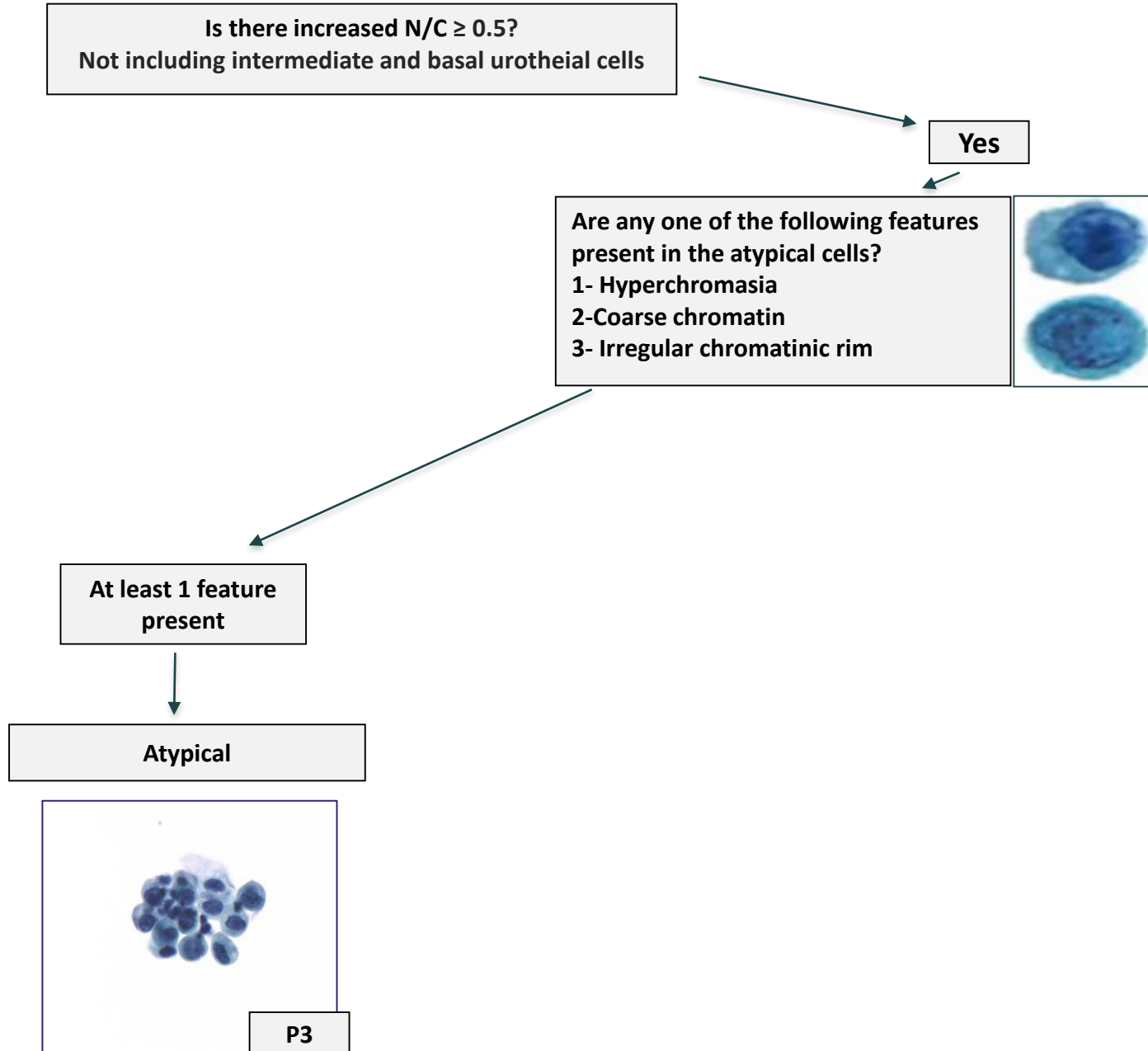


Ett observandum för kastad urin

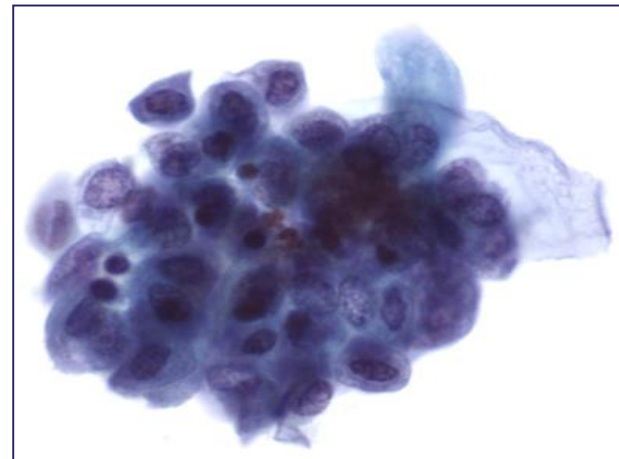
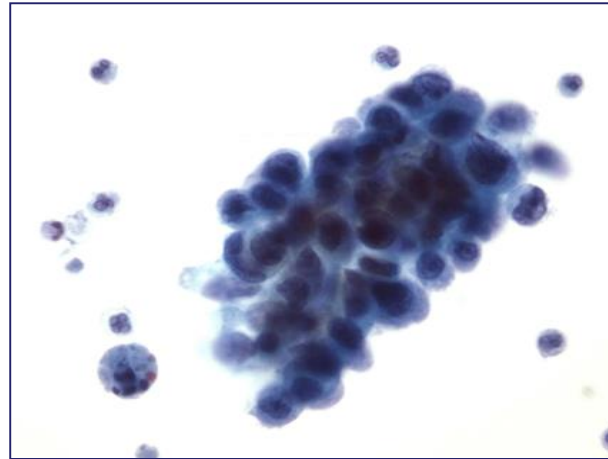
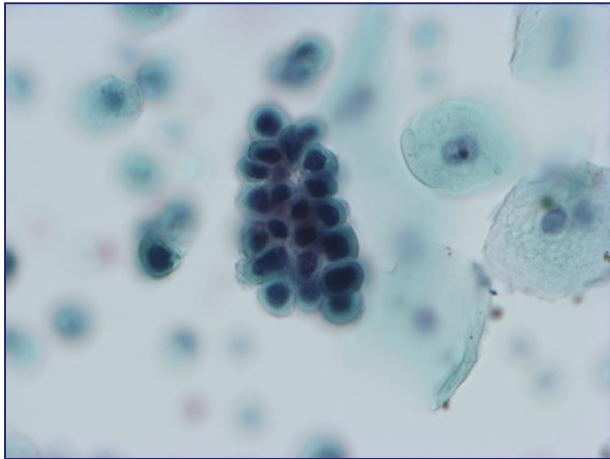
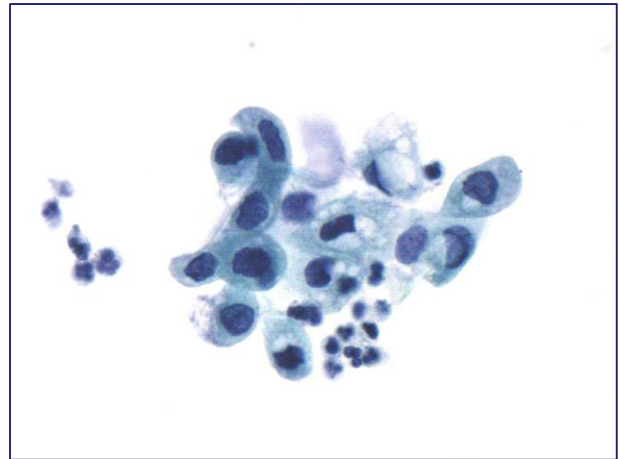
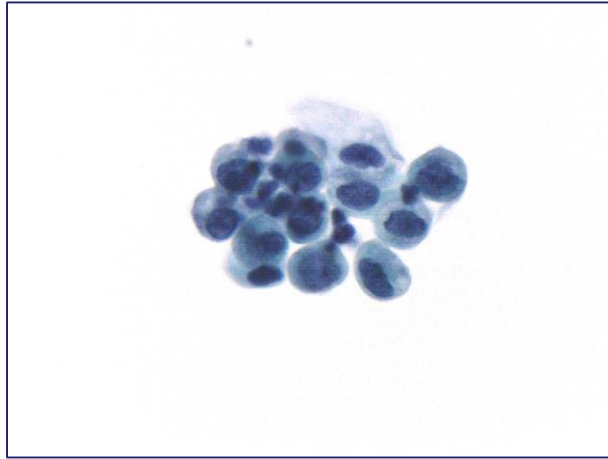
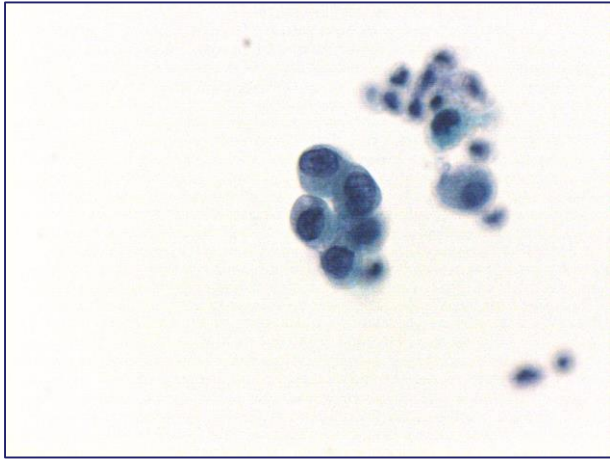
The Paris system for reporting urinary cytology



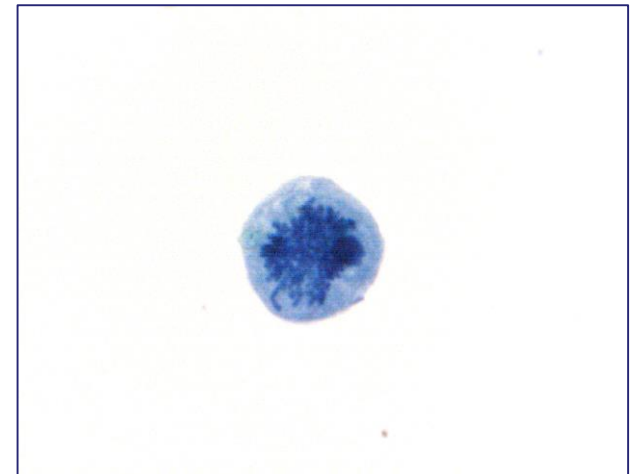
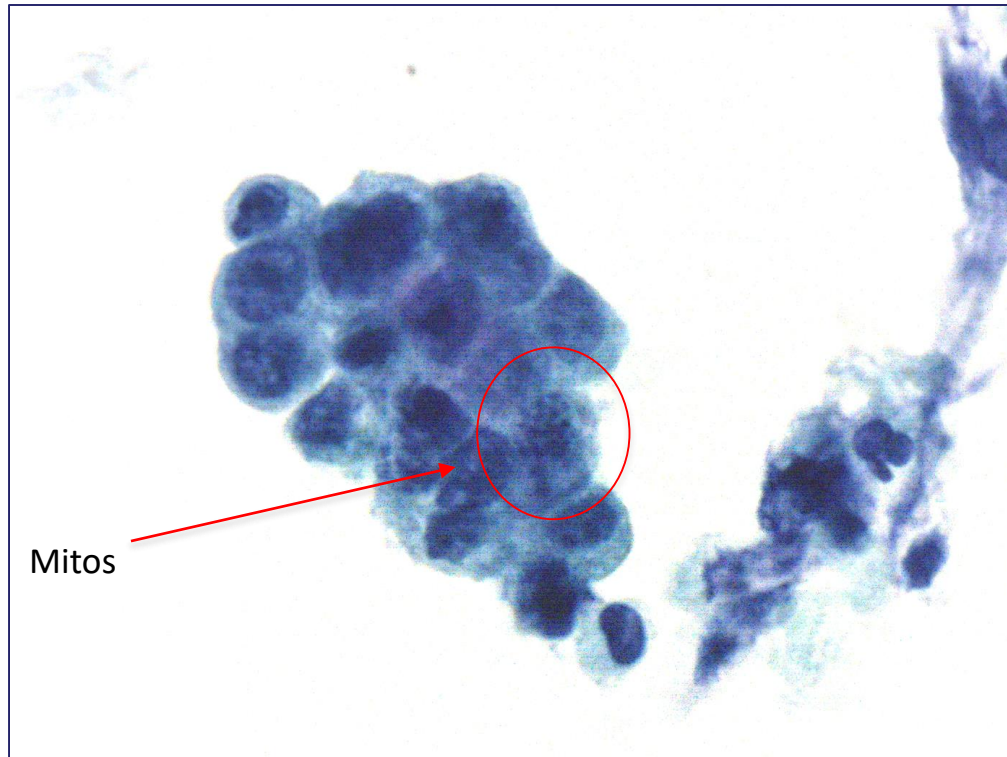
The Paris system for reporting urinary cytology



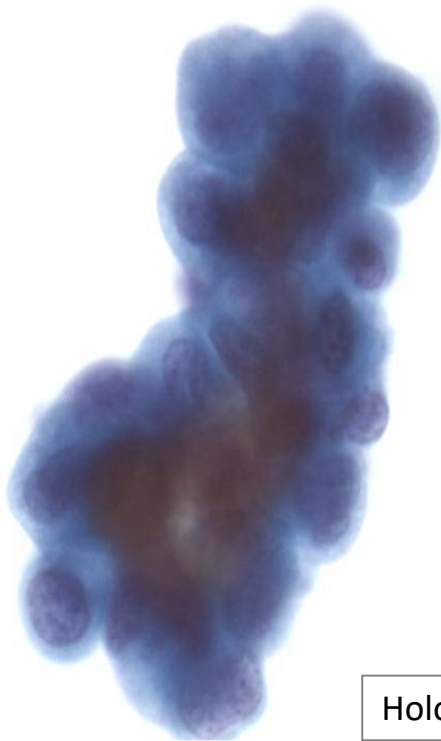
AUC (Atypical Urothelial Cells)



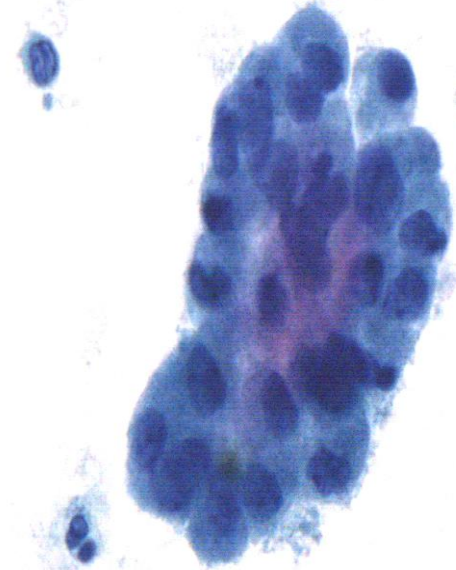
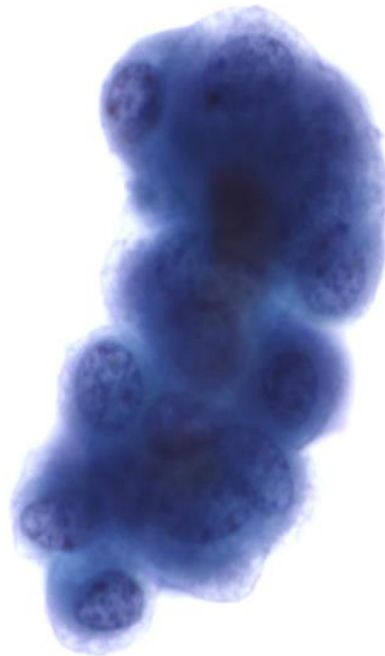
Mitos



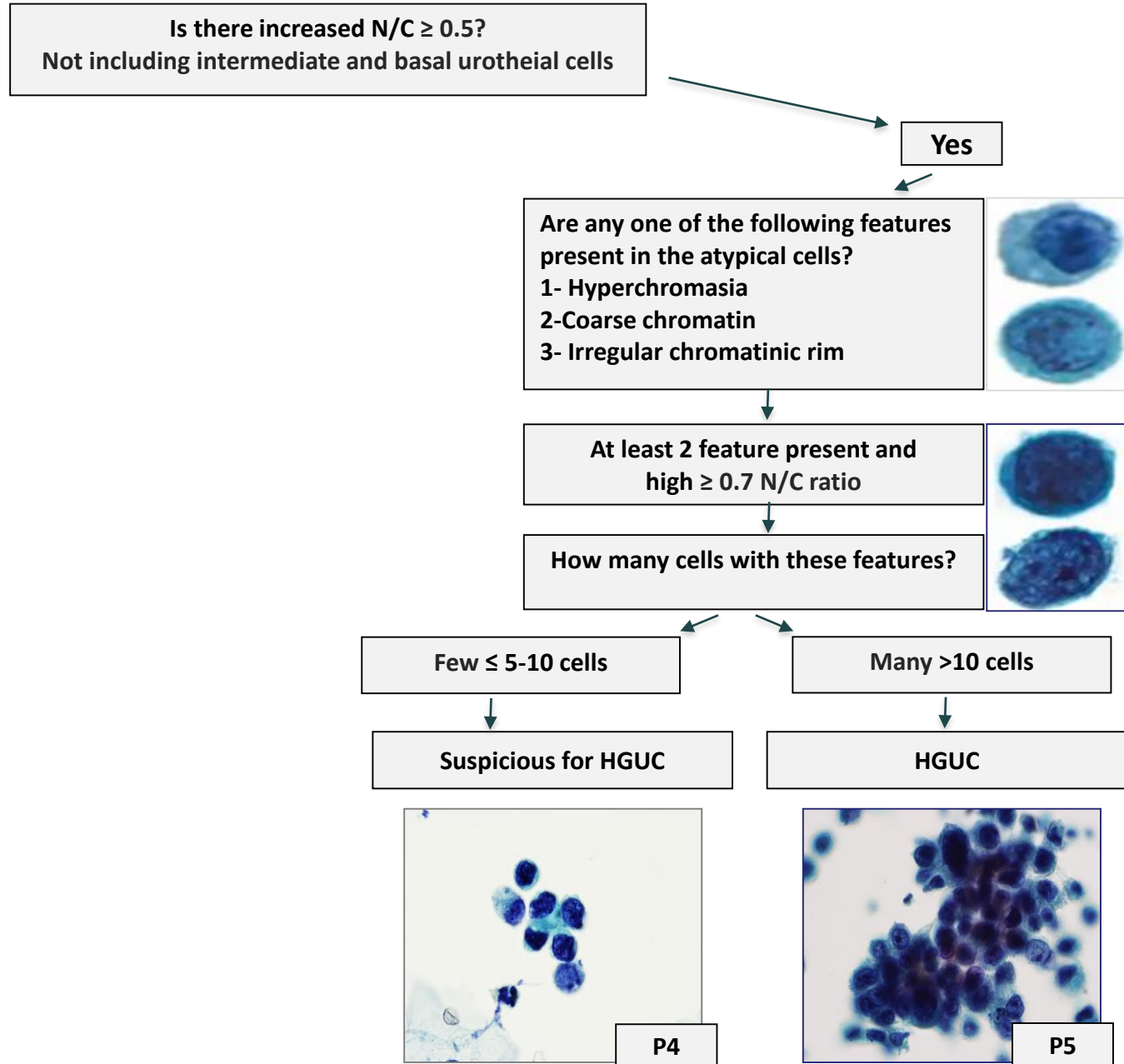
Atypi? Benign Papillär? eller ECC?



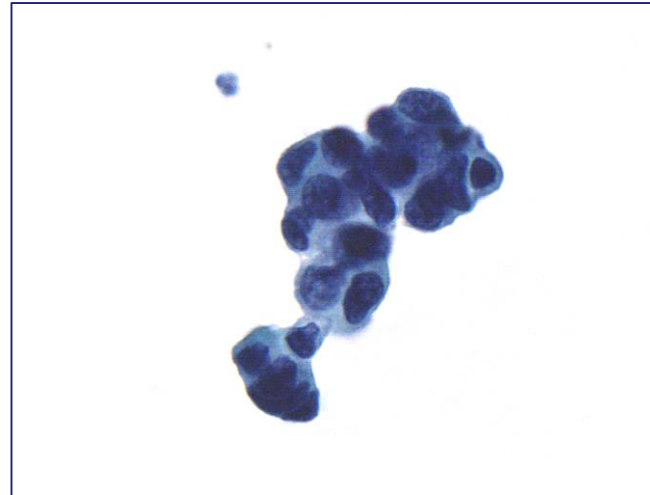
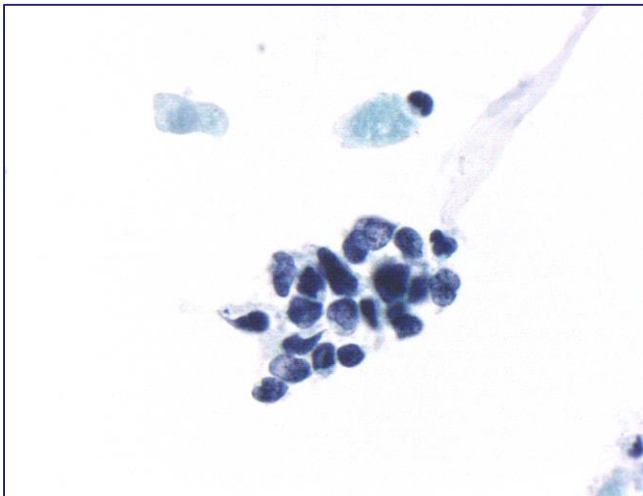
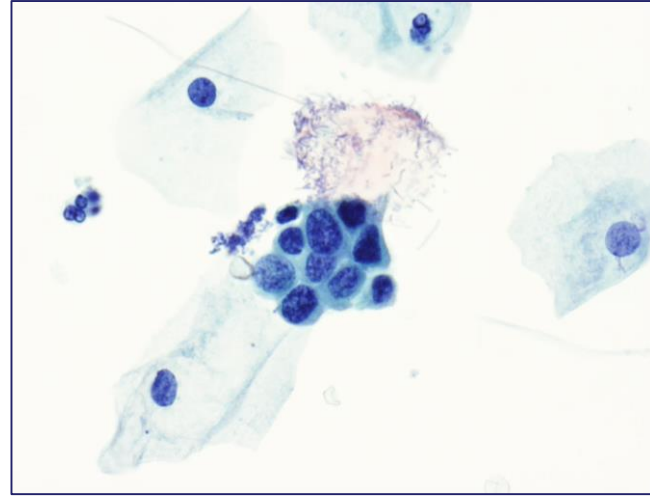
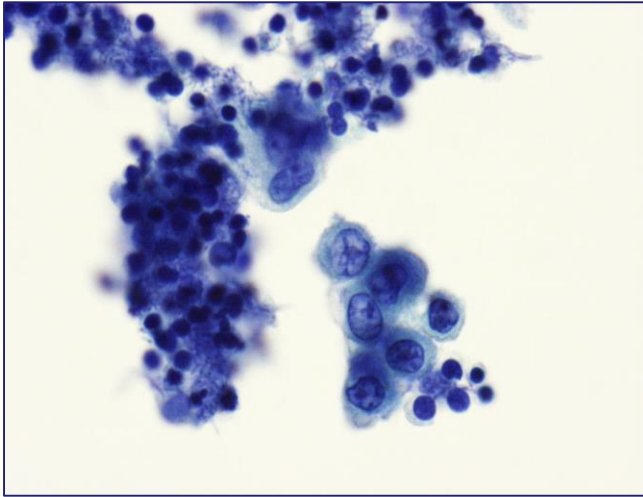
Hologic



The Paris system for reporting urinary cytology

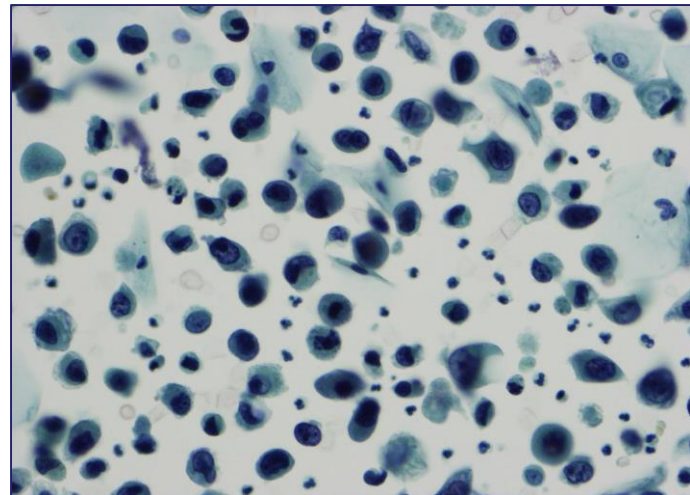
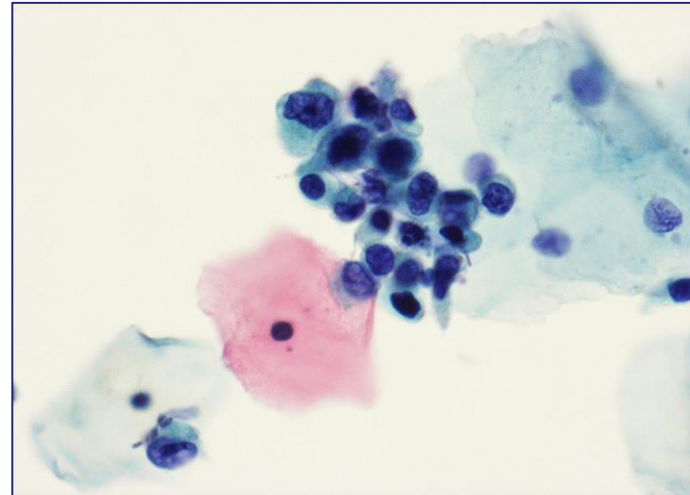


SHGUC

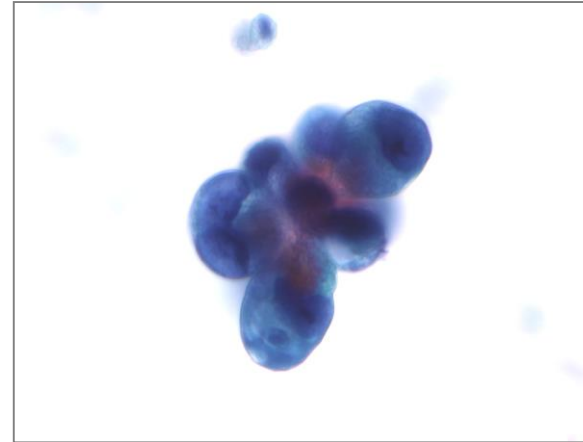
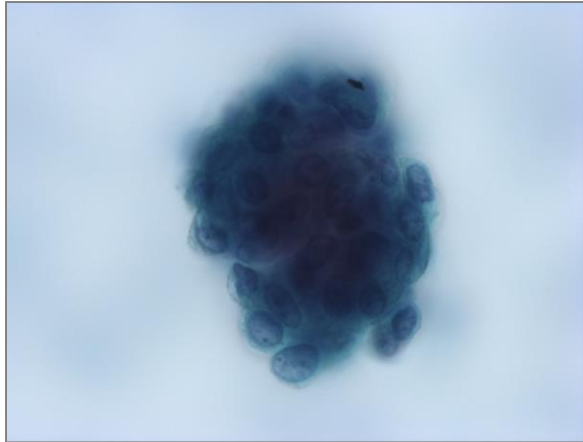
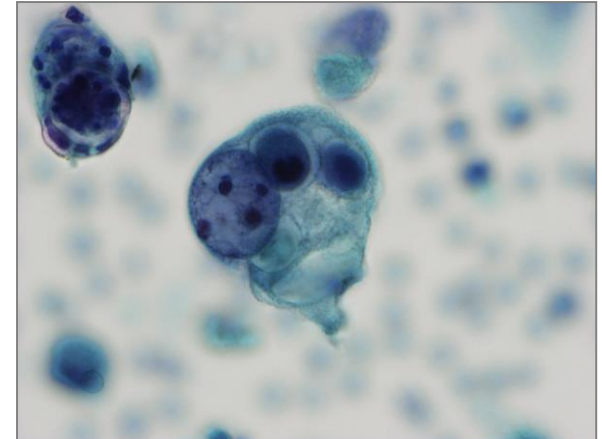
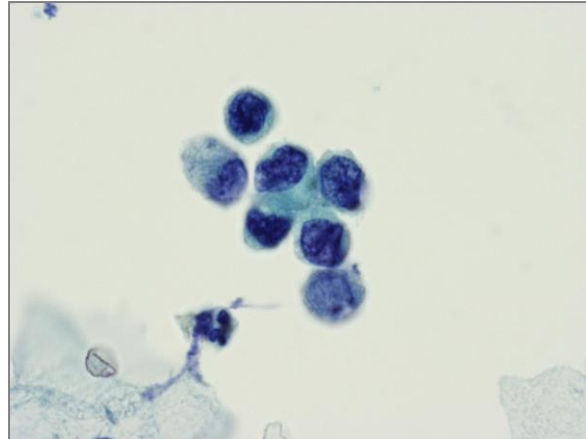
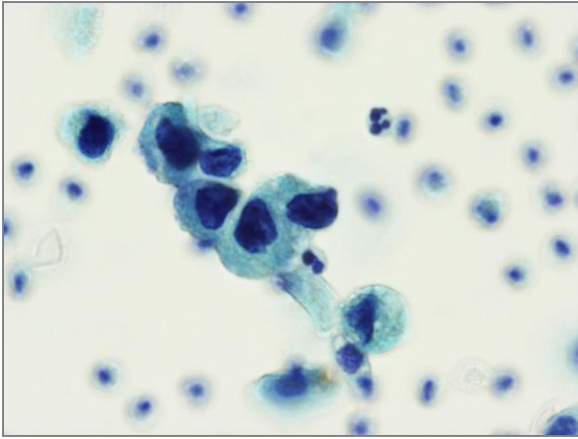


Höggradig

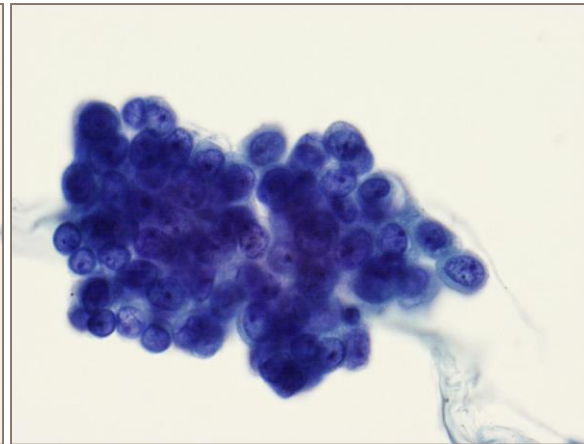
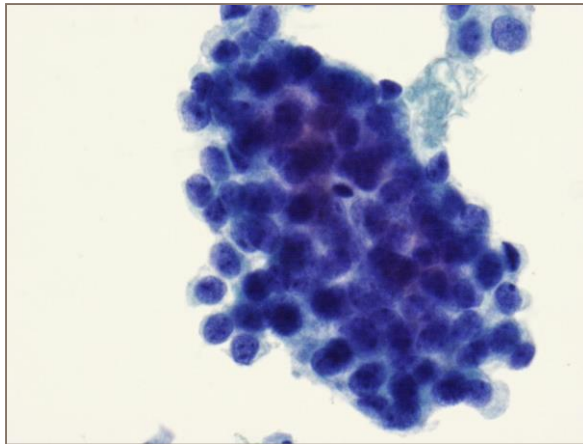
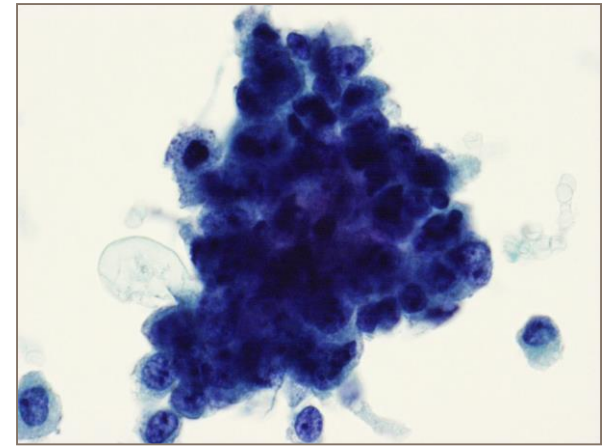
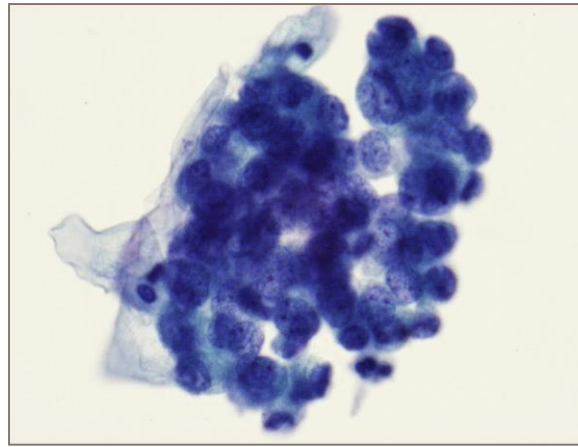
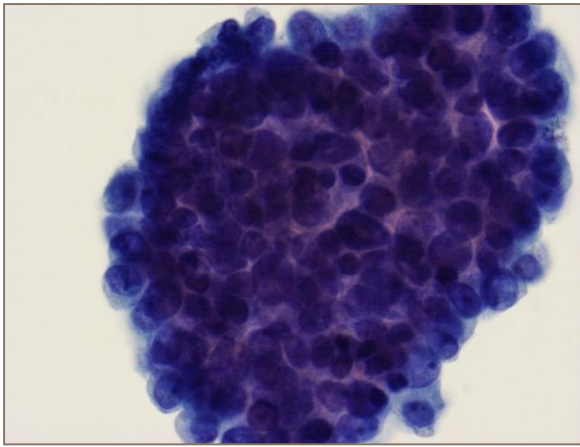
- Oftast cellrikt > 10 celler
- Kärn/cytoplasma kvot ≥ 0.7
- Grovt kärnkromatin
- Pleomorfisk kärna med prominent oregelbunden nukleoli
- Hyperkromatisk och ofta oregelbunden kärna.



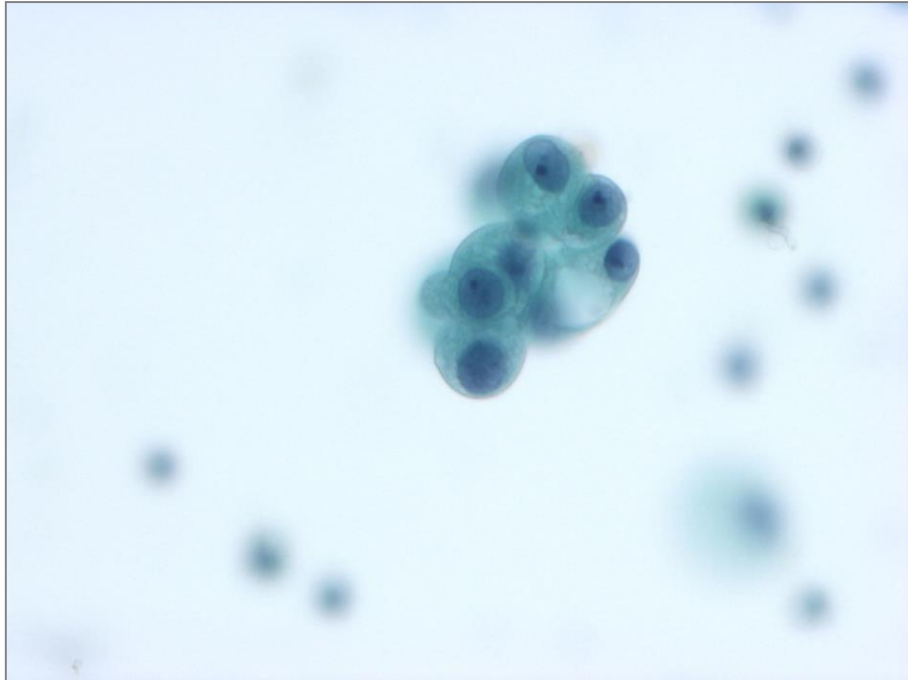
Höggradig



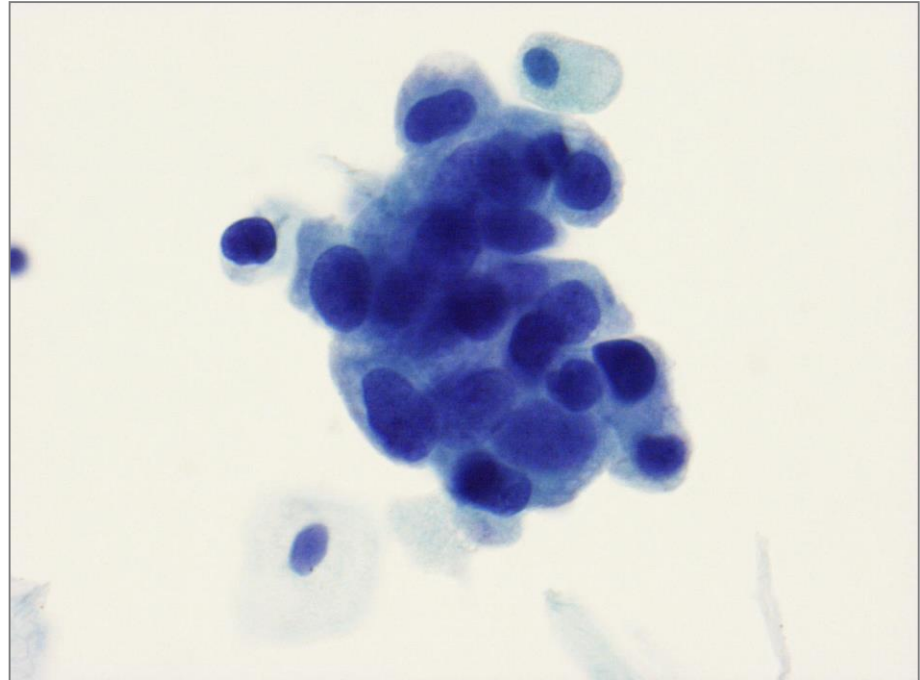
Höggradig



Reaktiv vs höggradig

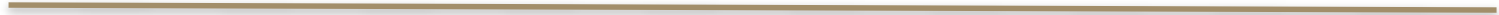


40 x
Cytologi: Benigt
Urinblåsbiopsi: Benigt



40 x
Cytologi: Uroepitelial atypi
Papillär urotelcellscancer
G2 pTa

Maligna celler av annan typ av malignitet (P6)



Maligna celler av annan typ av malignitet (P6)

Atypical Squamous Cells (ASC) and Categorization

For a discussion of this topic, the reader is referred to Chap. 8 (section “Atypical Squamous Cells”). As stated there, the presence of atypical squamous cells (ASC) in urine is a rare finding, and its categorization has proven problematic. The cells are not clearly urothelial and so placement under AUC is inappropriate. They are not clearly malignant, so inclusion in “non-urothelial malignancy” (NUM) also does not fit. The TPS solution is to place specimens exhibiting atypical squamous cells in a free-text (“other”) category with an explanatory note indicating the presence of ASC and its implications. Sample reports are provided in Chap. 8; example 4 specifically addresses atypical squamous cells.

Contents

- 1 Pathogenesis of Urothelial Carcinoma
Kaitlin E. Sundling, Tarjuna Anic, and Stefan E. Pambuccian
- 2 Adequacy of Urine Specimens (Adequacy)
Z. Laura Tabatabai, Gilliz A. Barkan, Montague Coe,
Daniel F.I. Kurtzyz, Matthew T. Olson, Toyooni T.
Christopher J. VandenBussche, and Poonam Vohra
- 3 Negative for High-Grade Urothelial Carcinoma
Christopher J. VandenBussche, Ashish Chandra, Jon
Zulha McCroskey, Christopher L. Owens, Powell T.
Yeh-Han Wang
- 4 Atypical Urothelial Cells (AUC)
Gilliz A. Barkan, Montague Coe

8 Non-Urothelial Malignancies and Other Miscellaneous Lesions 143
Tarik M. Elsheikh, Rana S. Hoda, Stefan E. Pambuccian, Jae Y. Ro,
and Sun Hee Sung

8 Non-Urothelial Malignancies and Other Miscellaneous Lesions 143
Tarik M. Elsheikh, Rana S. Hoda, Stefan E. Pambuccian, Jae Y. Ro,
and Sun Hee Sung

Atypical Squamous Cells (ASC) and Categorization

For a discussion of this topic, the reader is referred to Chap. 8 (section “Atypical Squamous Cells”). As stated there, the presence of atypical squamous cells (ASC) in urine is a rare finding, and its categorization has proven problematic. The cells are not clearly urothelial and so placement under AUC is inappropriate. They are not clearly malignant, so inclusion in “non-urothelial malignancy” (NUM) also does not fit. The TPS solution is to place specimens exhibiting atypical squamous cells in a free-text (“other”) category with an explanatory note indicating the presence of ASC and its implications. Sample reports are provided in Chap. 8; example 4 specifically addresses atypical squamous cells.

Nuclear Cytoplasmic (N/C) Ratio as a Criterion

One of the significant and as yet unresolved issues regards an important cytologic criterion to determine TPS categories, namely, the N/C ratio. This is a number calculated by dividing the cross-sectional nuclear area by the cross-sectional cytoplasmic area of the cell ($\frac{\text{area of nucleus}}{\text{area of cytoplasm}}$). Typically, this ratio is estimated by microscopists and is exposed to some degree of subjectivity. An N/C ratio of 0.5 was chosen by the authors of TPS as a discrete value to signal the possibility of a significant lesion. It is well recognized that the estimation and value chosen is only

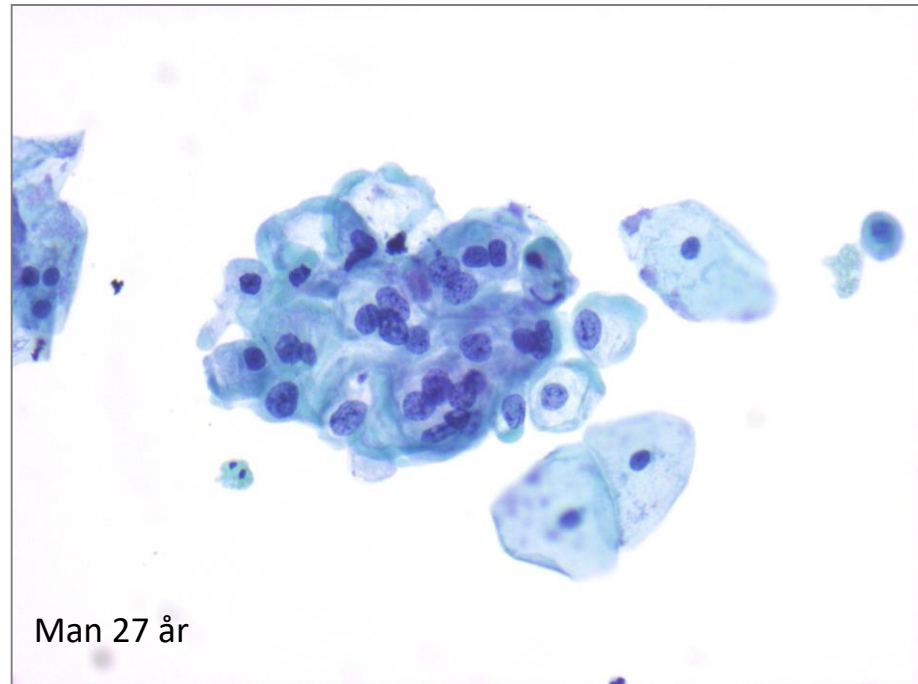
As a well explained in Chapter 8, the presence of atypical squamous cells (ASC) in urine is a rare finding, and its categorization has proven problematic. The cells are not clearly urothelial and so placement under AUC is inappropriate. They are not clearly malignant, so inclusion in “non-urothelial malignancy” (NUM) also does not fit. The TPS solution is to place specimens exhibiting atypical squamous cells in a free-text (“other”) category with an explanatory note indicating the presence of ASC and its implications. Sample reports are provided in Chapter 8; example 4 specifically addresses atypical squamous cells.

TPS Criteria Inclusion for All Preparation

TPS Criteria Inclusion for All Preparation

Humant papillomvirus

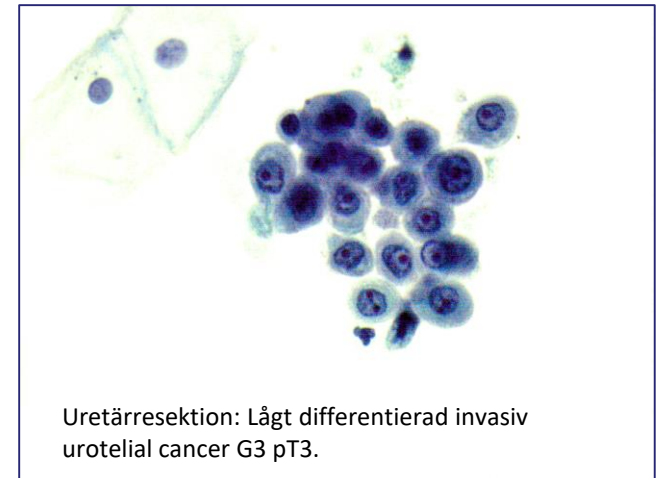
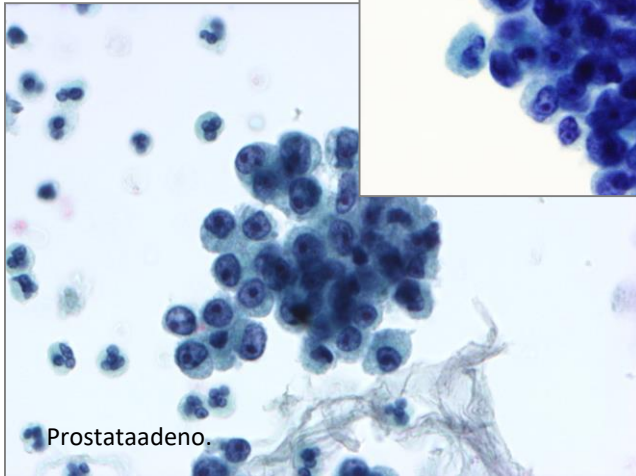
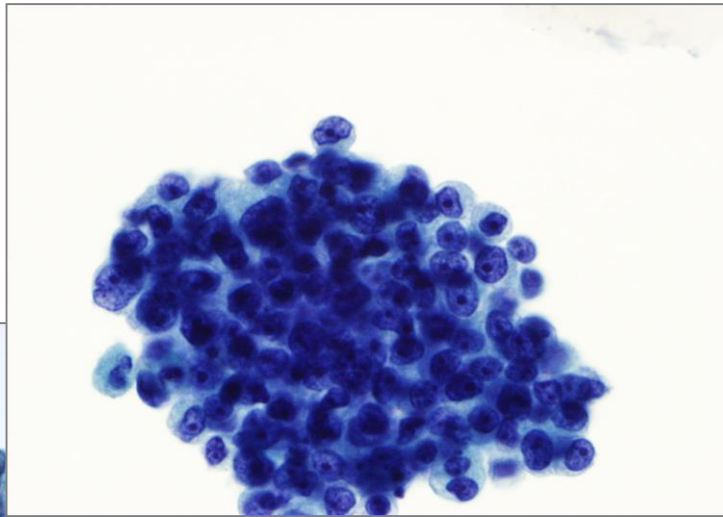
- HPV



Insänt prov visar innehåll av atypiska celler med skivepiteldifferentiering, atypin kan vara orsakad av virus, typen **Humant papillomvirus**

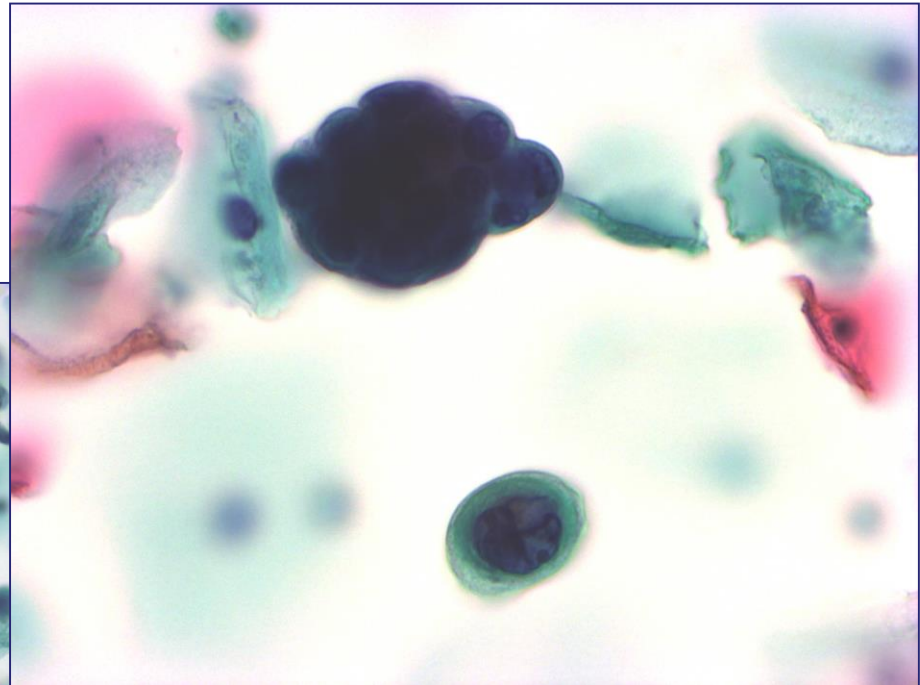
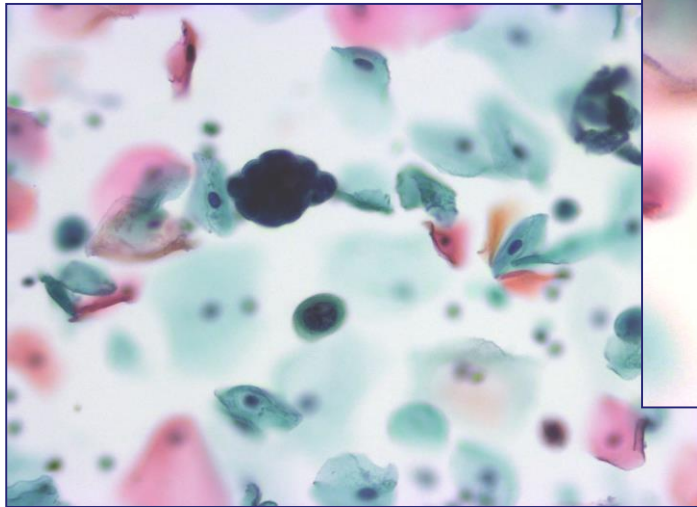
Prostataadenocarcinom

- Små celler med stora markerad nukleoler
- Bubblig cytoplasma

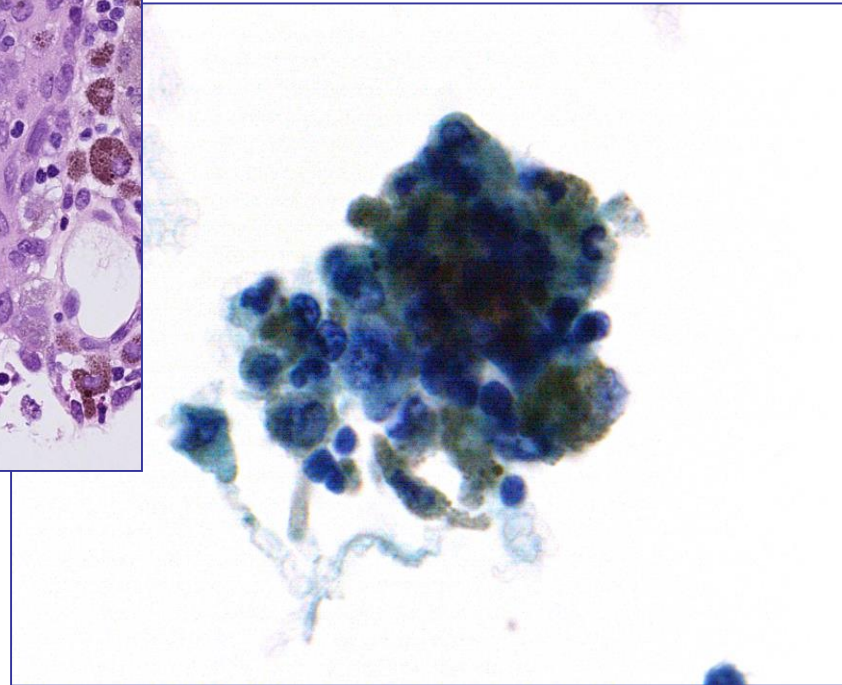
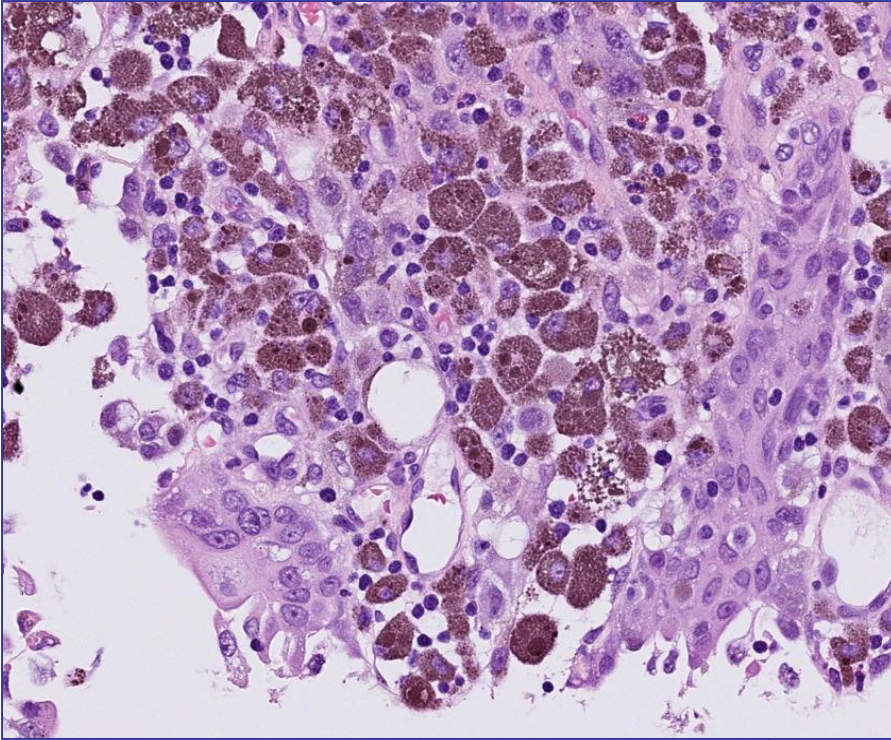


Metastas, endometriecancer

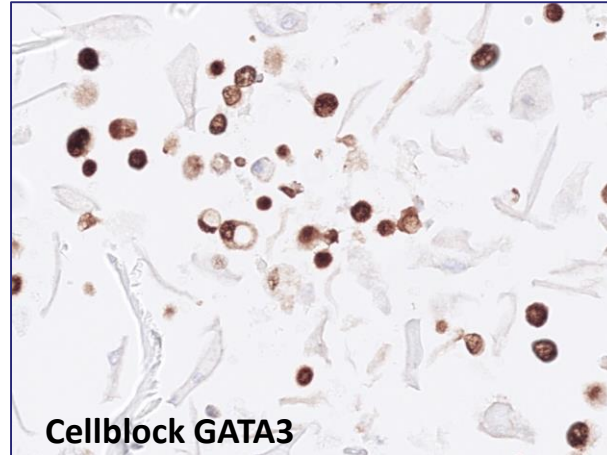
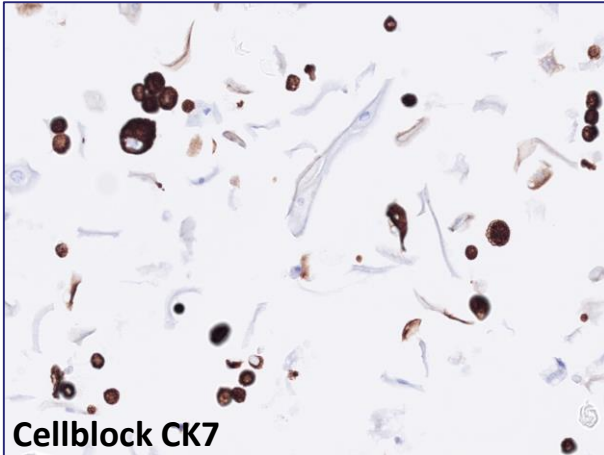
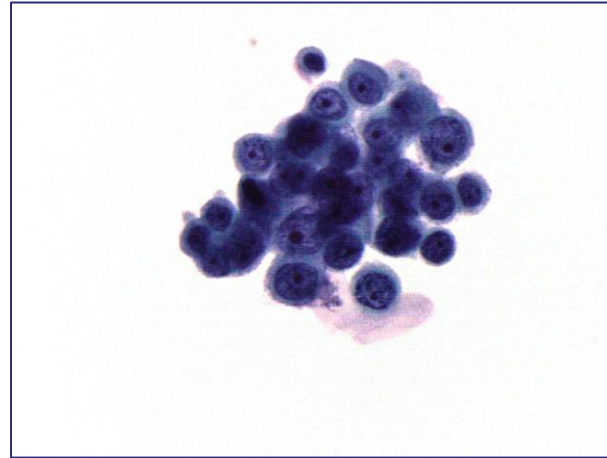
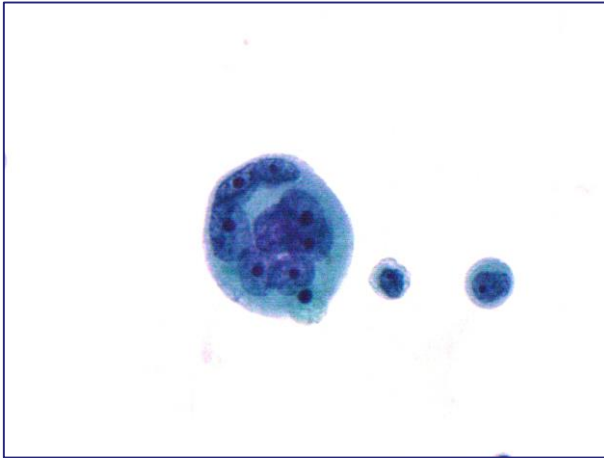
- Små celler med hyperkromatiska kärnor
- Tät cellgrupp
- Mycket sparsamt cytoplasma/
ibland saknas cytoplasma



Malignt melanom

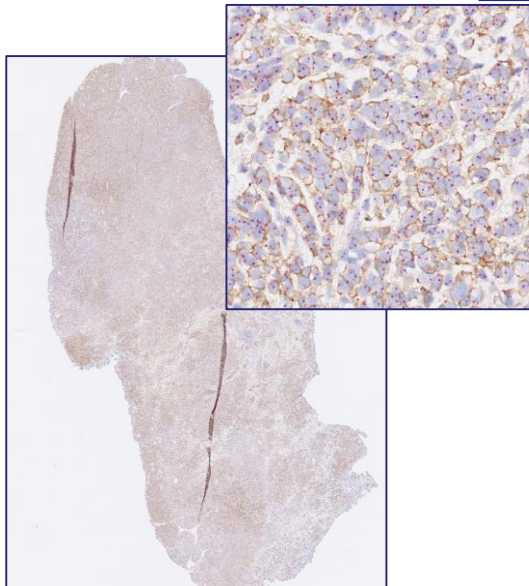
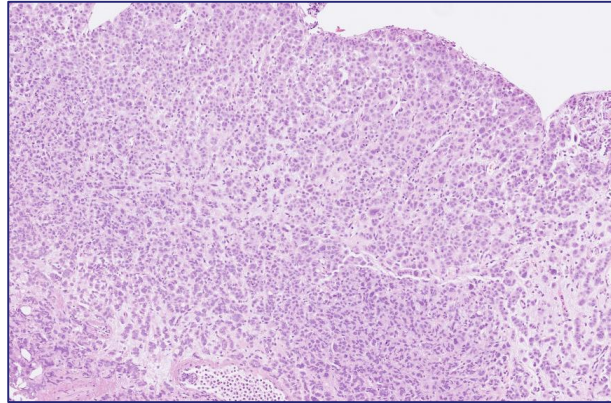


Metastas, bröstcancer

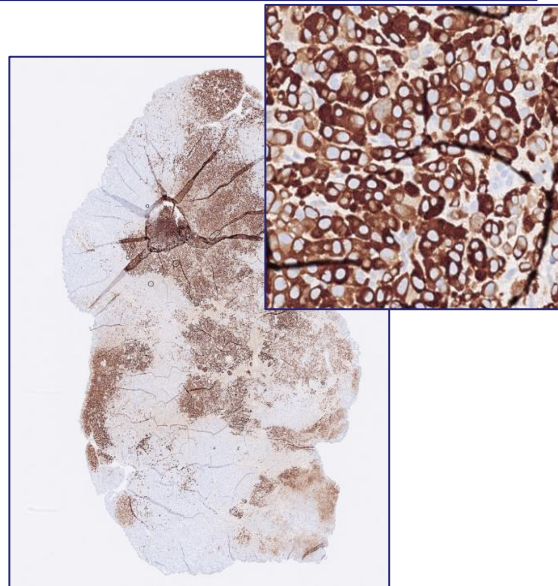


Metastas, lobulär bröstcancer

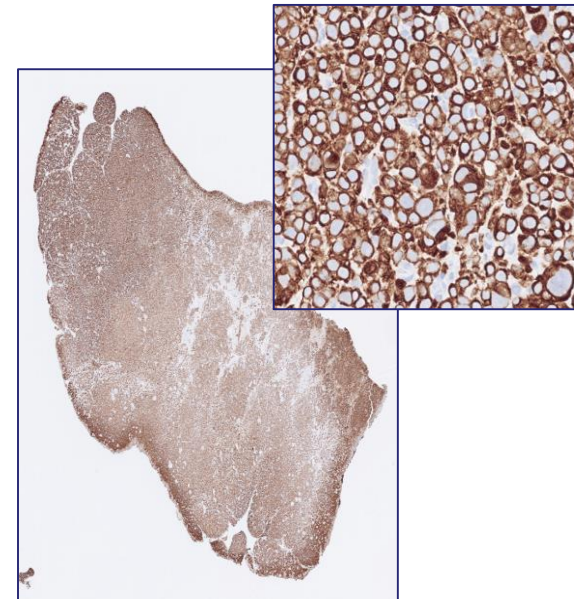
Tumörcellerna utfaller
positiva för HERB2, CK7/19
och mammoglobin



HERB2



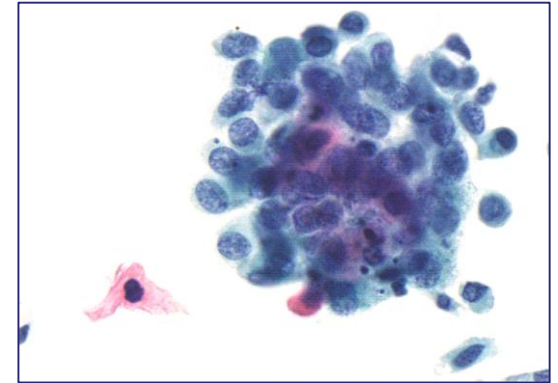
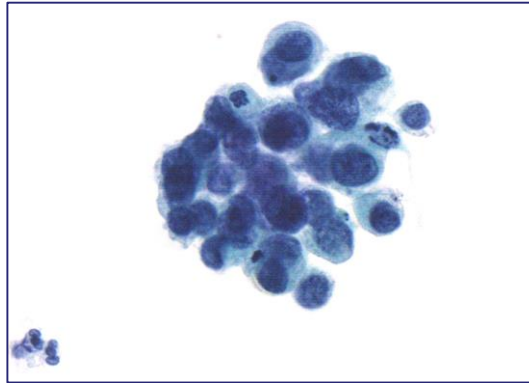
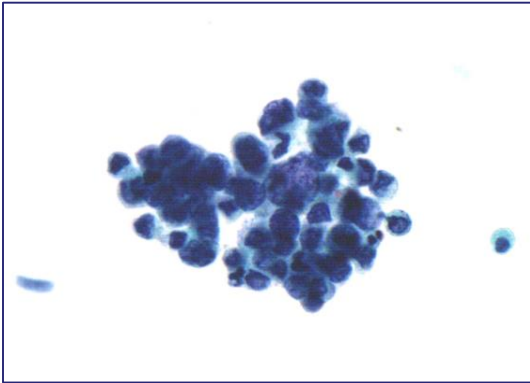
MAGLO



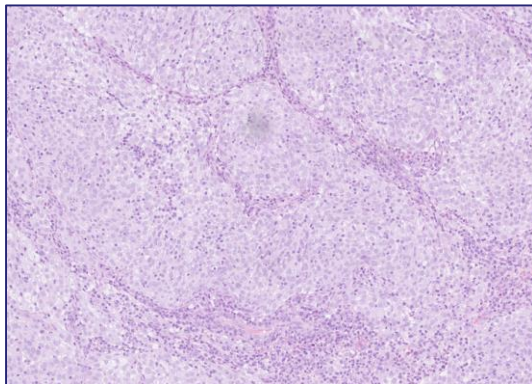
CK7/19

Skivepitelcancer.

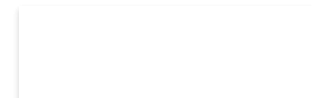
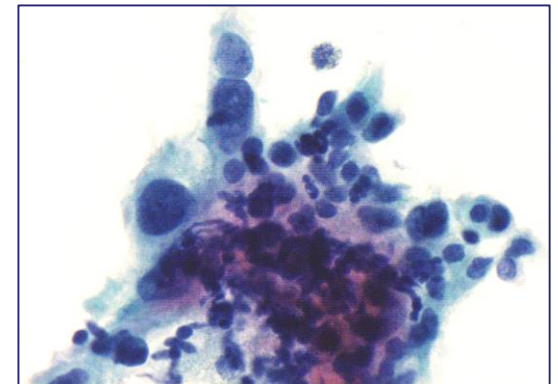
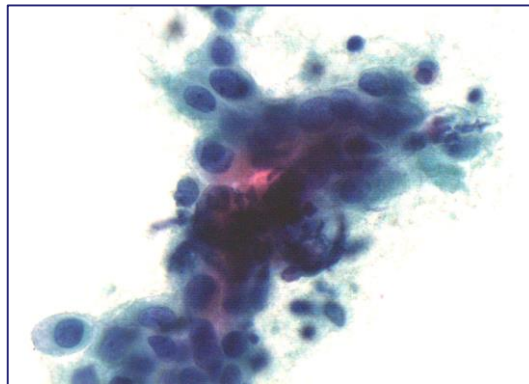
Kastad urin



PAD

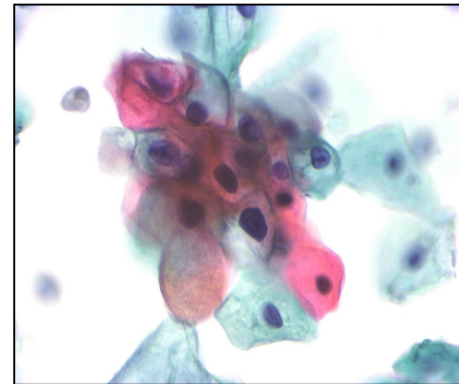
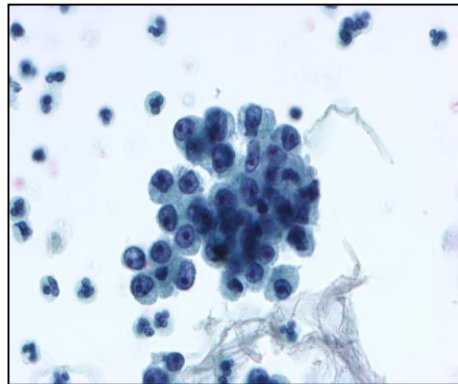
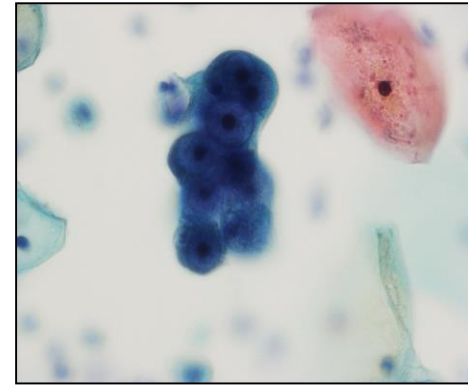
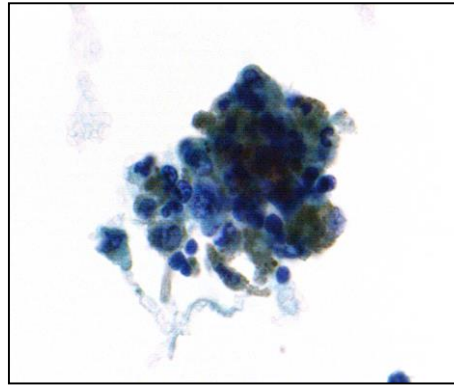
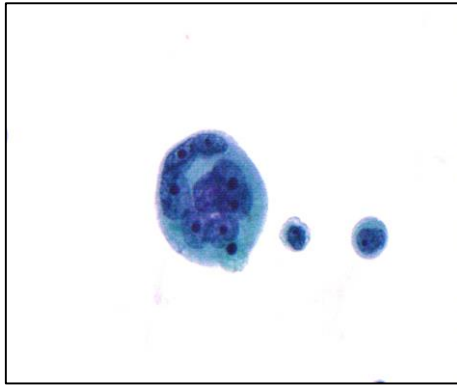


Cervix



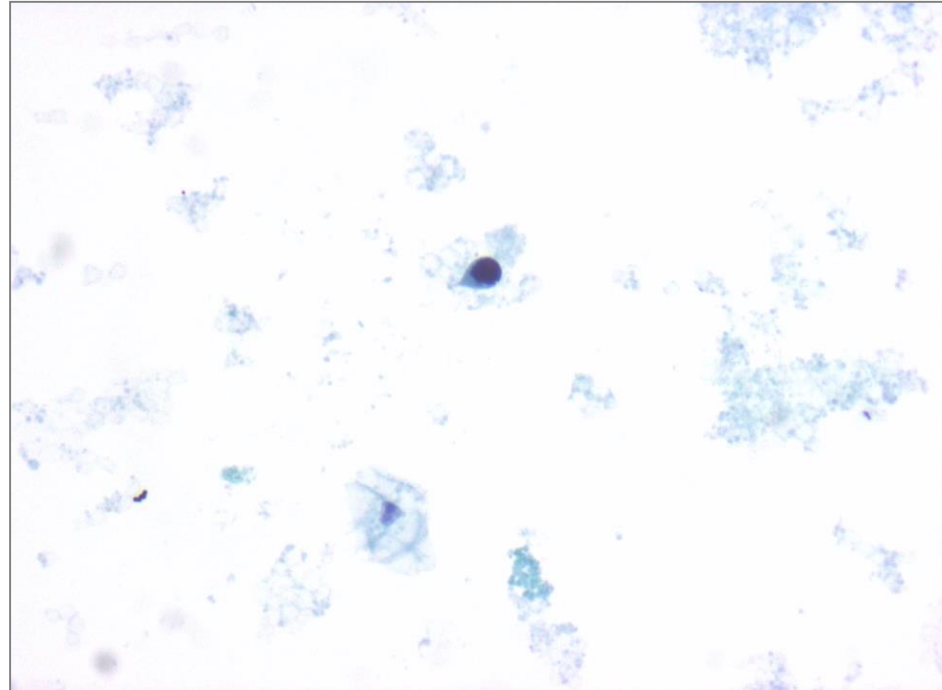
The Paris system for reporting urinary cytology

P6- Non-Urothelial Malignancies and Other Miscellaneous Lesions



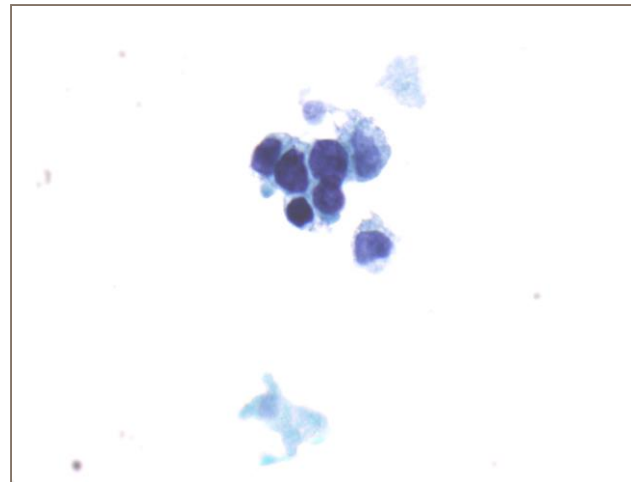
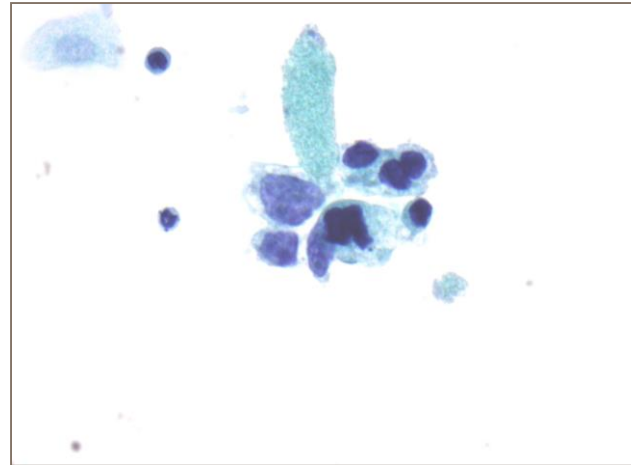
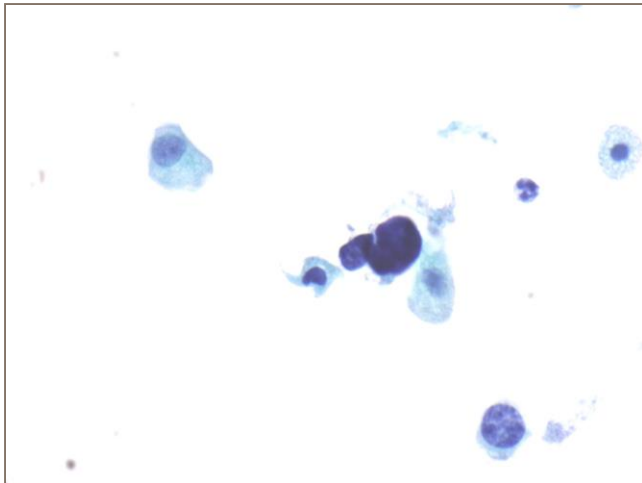
Blodigt material

- Man / 57 år 
- Kastad urin



Blodigt material, glas 2 efter lysering

- Man / 57 år ♂
- Kastad urin



Tips och råd

- **Uroepiteliala grupper i kastad urin**
- **Cellrikt material med urotelceller i kastad urin**
- **Rikligt med degenerade urotelceller**
- **Täta stora grupper oavsett fin/nätt kromatin eller runda kärnor**
- **Blod i urin**



Tack för ert uppmärksamhet

