

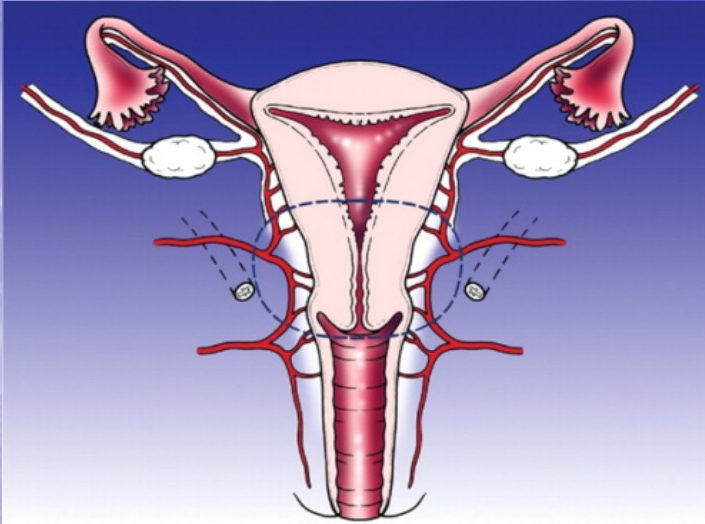
Cytology after Trachelectomy

Karin Denton

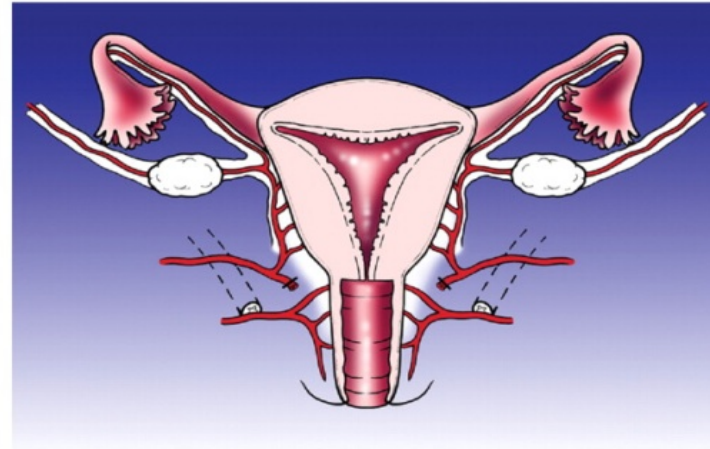
North Bristol NHS Trust

What is a Trachelectomy?

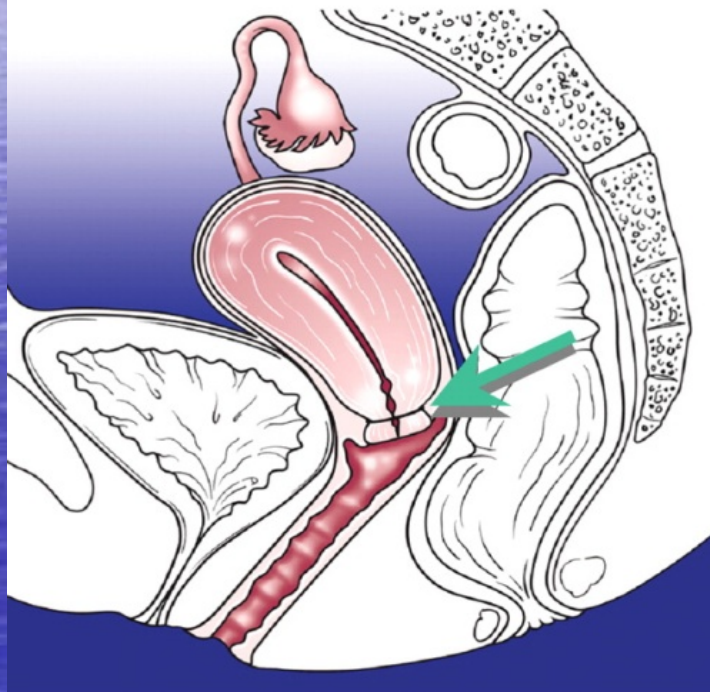
- Radical excision of the cervix
- Treatment for cervical carcinoma stage 1A2 and small 1B1
- Alternative to Radical Hysterectomy
- Fertility sparing



(a)



(b)



(c)

Evidence base for trachelectomy

Medscape®		www.medscape.com										
Total number of patients	Median age (years)	Number of patients with tumor stage (%)			Number of patients with tumor size (%)		Number of patients with described histology (%)			Number of patients with LVSI (%)	Number of patients with LN+ (%)	
		IA1	IA2	IB1	≤2cm	>2cm	SCC	AC ^a	Other			
123 ¹¹	31	0	2 (2)	121 (98)	NA	NA	83 (68)	36 (29)	4 (11)	39 (32)	7 (6)	
108 ¹⁰	32	18 (17)	21 (19)	69 (64)	108 (100)	0	75 (69)	33 (31)	0	38 (35)	4 (4)	
109 ^{2,b}	32	13 (14)	14 (14)	56 (59) ^d	67 (70)	28 (30)	76 (80)	19 (20)	1	23 (24)	8 (7)	
93 ¹²	30	39 (42)	22 (24)	31 (33) ^d	85 (91)	8 (9)	40 (43)	50 (54)	3 (3)	31 (33)	2 (2)	
82 ⁴	31	4 (5)	24 (30)	51 (61) ^d	72 (90)	10 (10)	49 (60)	32 (39)	1 (1)	17 (21)	5 (6)	
21 ⁹	30	0	1 (5)	20 (95)	NA ^f	NA ^f	12 (57)	9 (43)	0	3 (14)	1 (5)	
12 ^{8,c}	31	0	8 (80)	2 (20)	10 (83)	2 (17)	4 (40)	6 (60)	0	1 (10)	0	
548 ⁹	31 ⁹	74 (14) ⁹	92 (17) ⁹	350 (66) ⁹	342/390 (88) ⁹	48/390 (12) ⁹	339 (64) ⁹	185 (34) ⁹	9 (2) ⁹	152 (28) ⁹	27 (5) ⁹	

^aIncludes adenosquamous tumors. ^bInformation missing on additional 13 patients in whom trachelectomy was abandoned. ^cInformation missing on additional two patients who underwent completion radical hysterectomy. ^dSome patients in this study had stage IB2, IIA or IIB disease. ^eCombined data. ^fMean size 1.1 cm (range 0.3–3 cm). Abbreviations: AC, adenocarcinoma; LN+, lymph-node involvement; LVSI, lymphovascular space involvement; NA, not available; SCC, squamous-cell carcinoma.

Source: Nat Clin Pract Oncol © 2007 Nature Publishing Group

Recurrence after trachelectomy

- Rare
- Usually central ie pelvic side wall, metastasis
- Isolated vault recurrence extremely rare
- Obvious at clinical follow up

Bristol follow up after trachelectomy

- All have clinical follow up 6-12 monthly for at least 10 years
- Roll of cytology?

Challenges of cytology


- Getting a sample
- What are you sampling

The Bristol series

- 12 cases
- 80 follow up cytology samples range 1-12
- 78/80 LBC
- Both SCC and Adenocarcinoma represented

Initial results

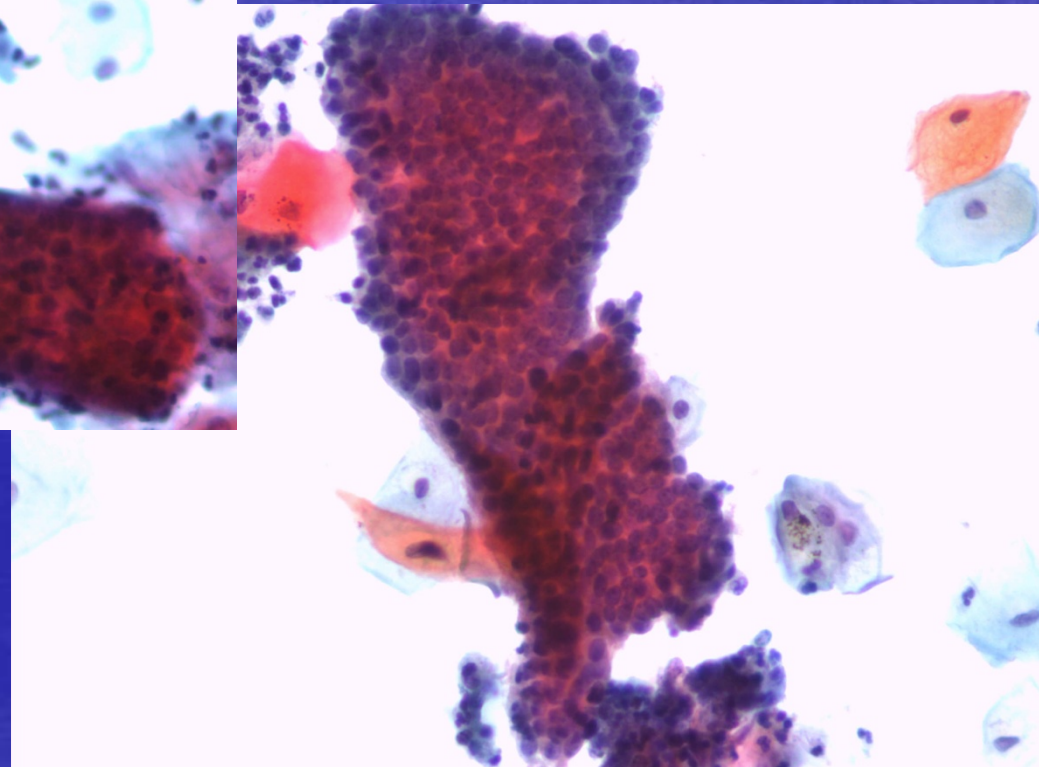
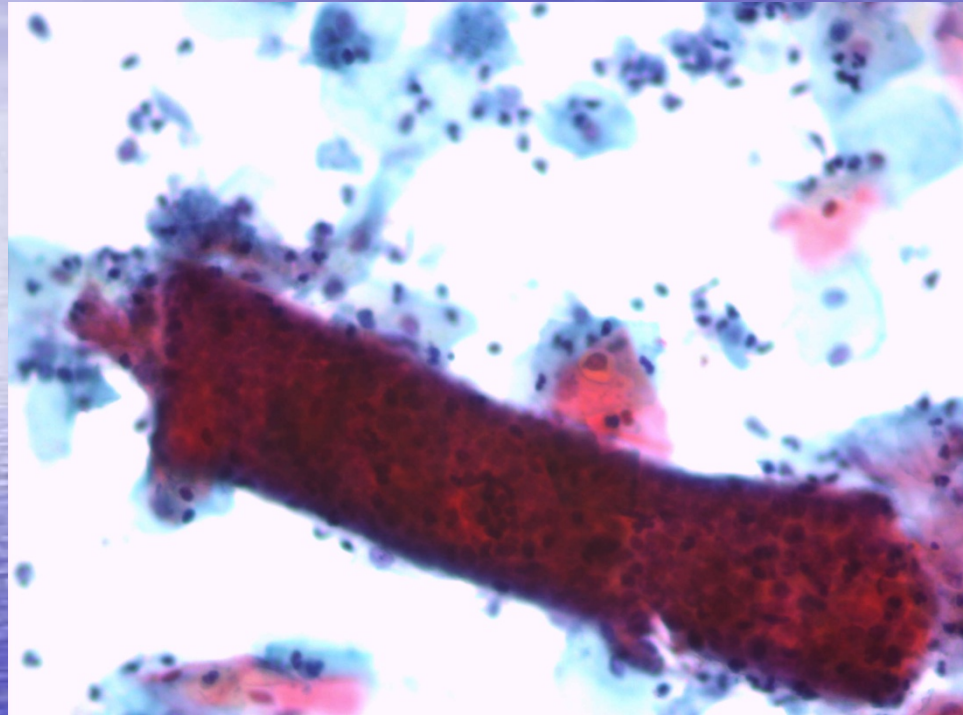
Initial result	review	comments
Negative (69)	All true negative	
Inadequate (3)	All inad	Insufficient cells
BC in endocervical cells (3)	2 negative on review	
Mild dysk (1)	Negative	
?endocervical glandular abnormality (3)	1 Invasive squamous carcinoma 2 not available	Almost certainly overcalls

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- Results robust on review
 - Inadequacy not a problem
 - Most of the disagreements are overcalls

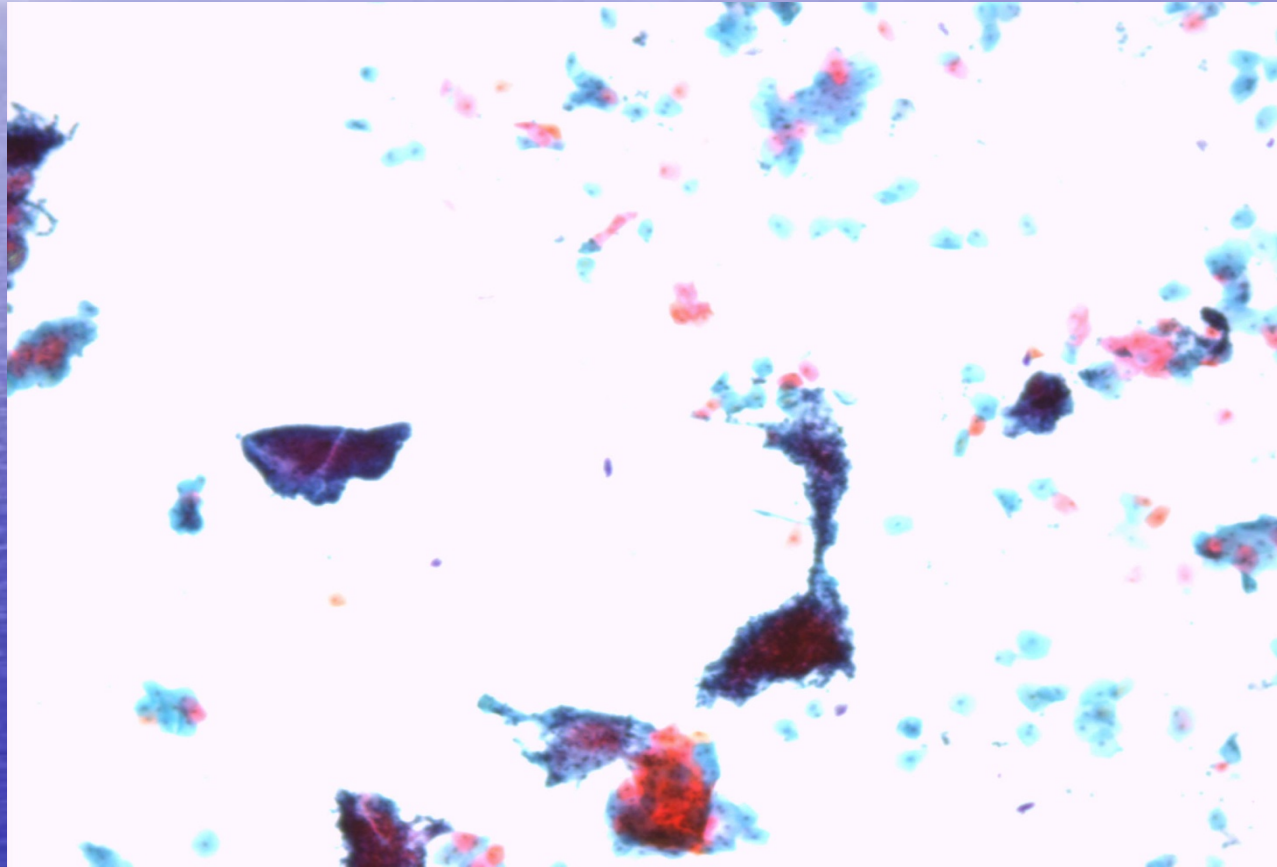
Cytology findings

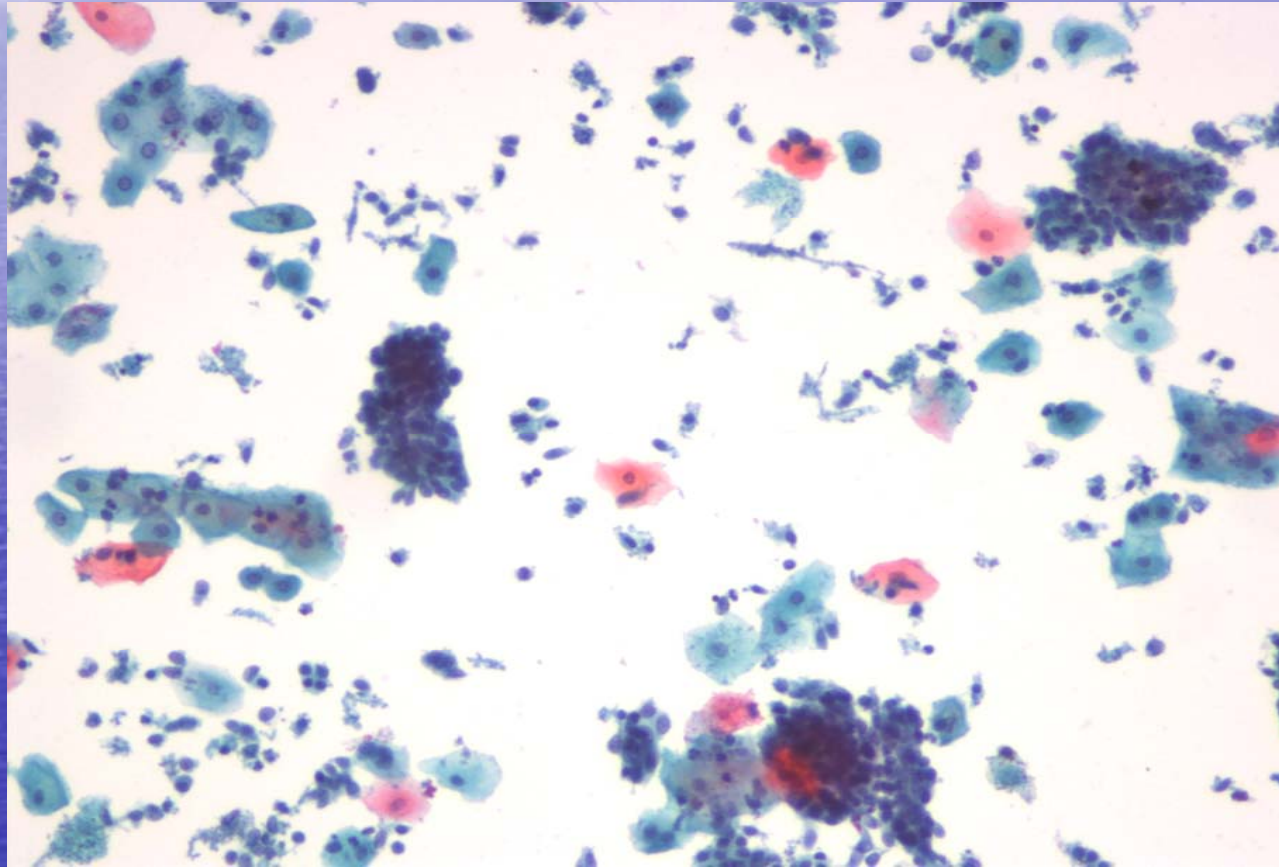
- Lower segment sampling 25/80
- Other endometrial cells 21/80
- Difficult metaplastic cells 25/80
- Endocervical cells 8/80 (4 cases)
- Superficial pattern 27/80
- Inflammatory pattern 13/80

Direct endometrial sampling

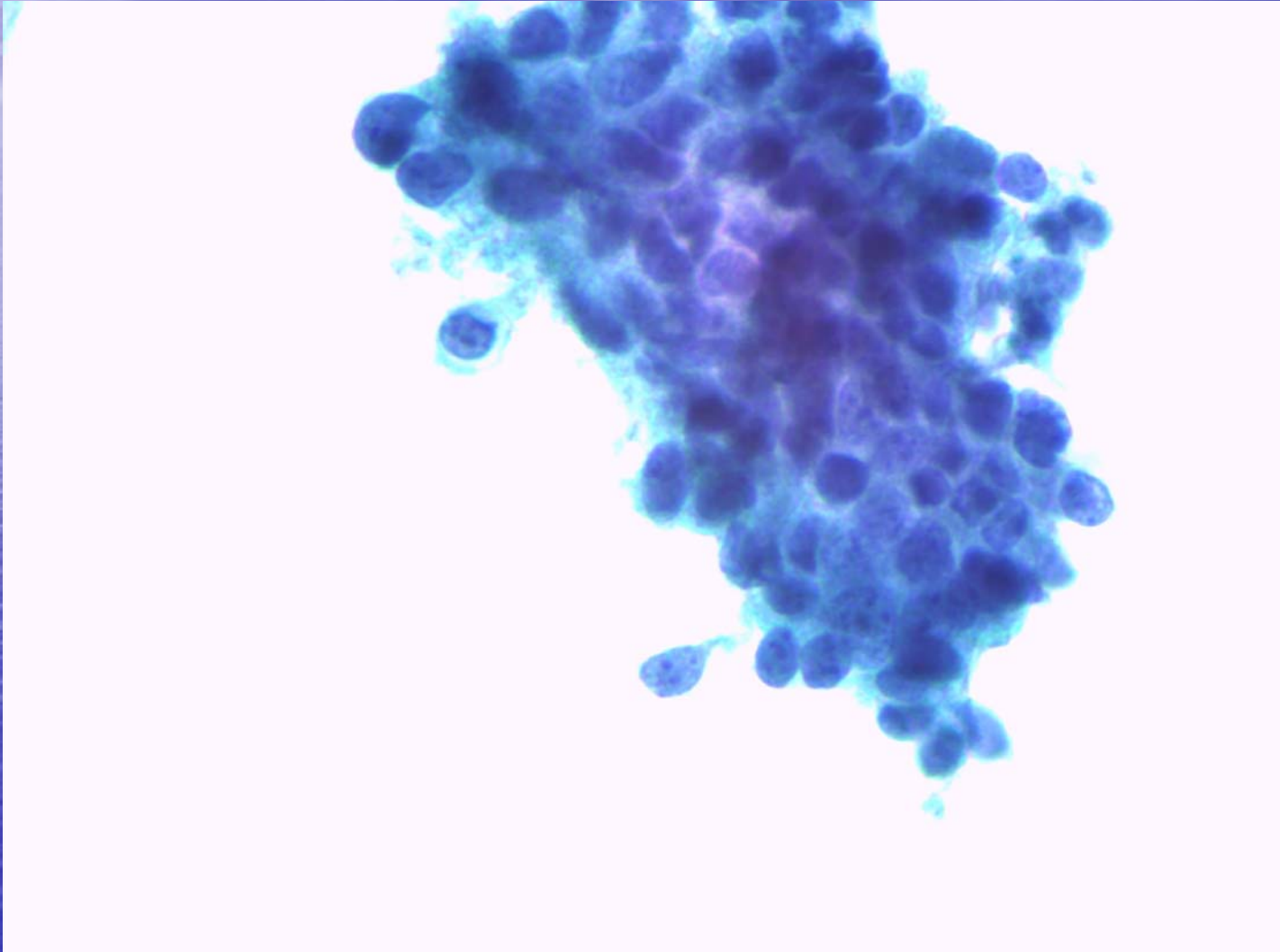


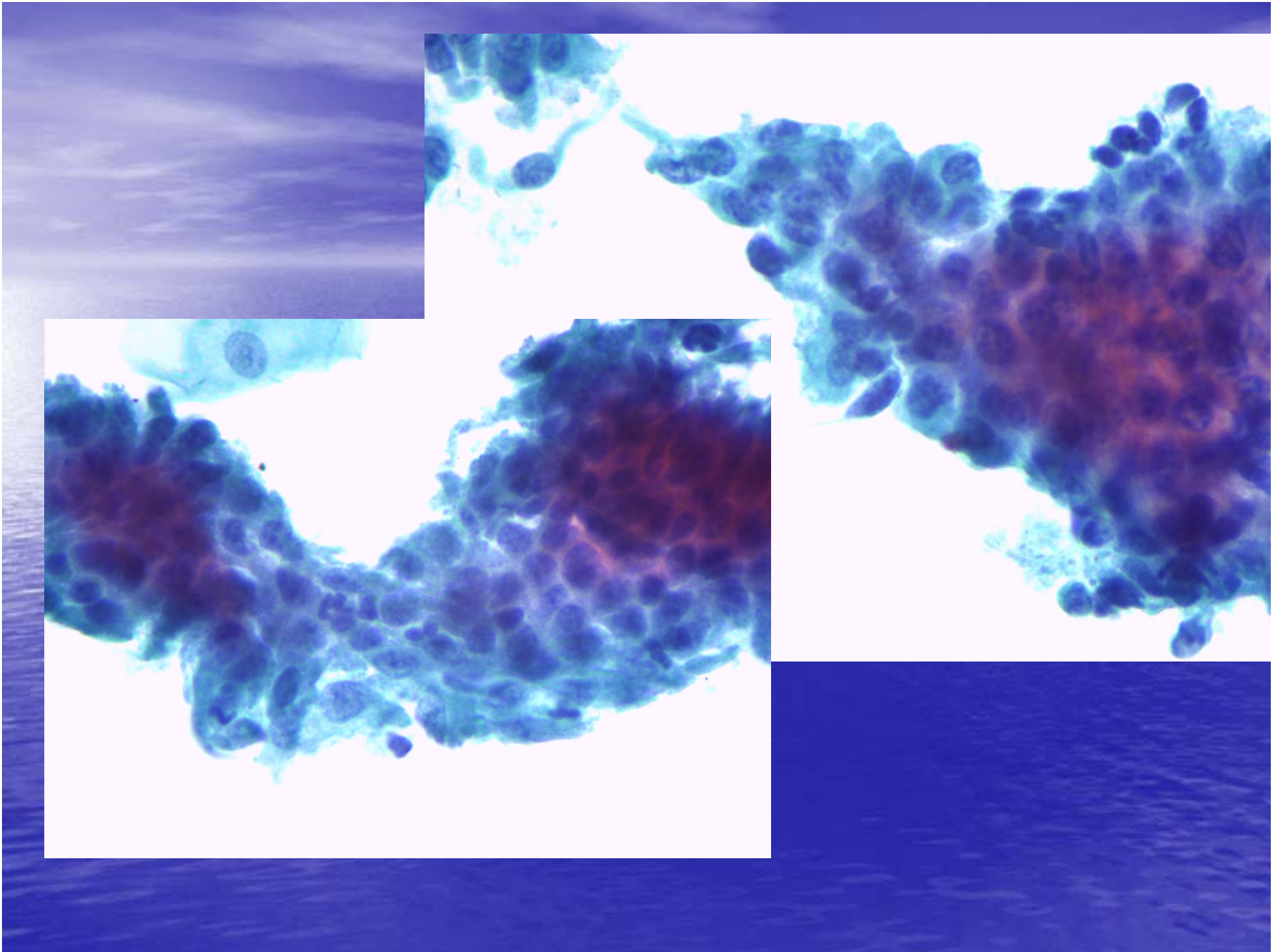
Other endometrial cells

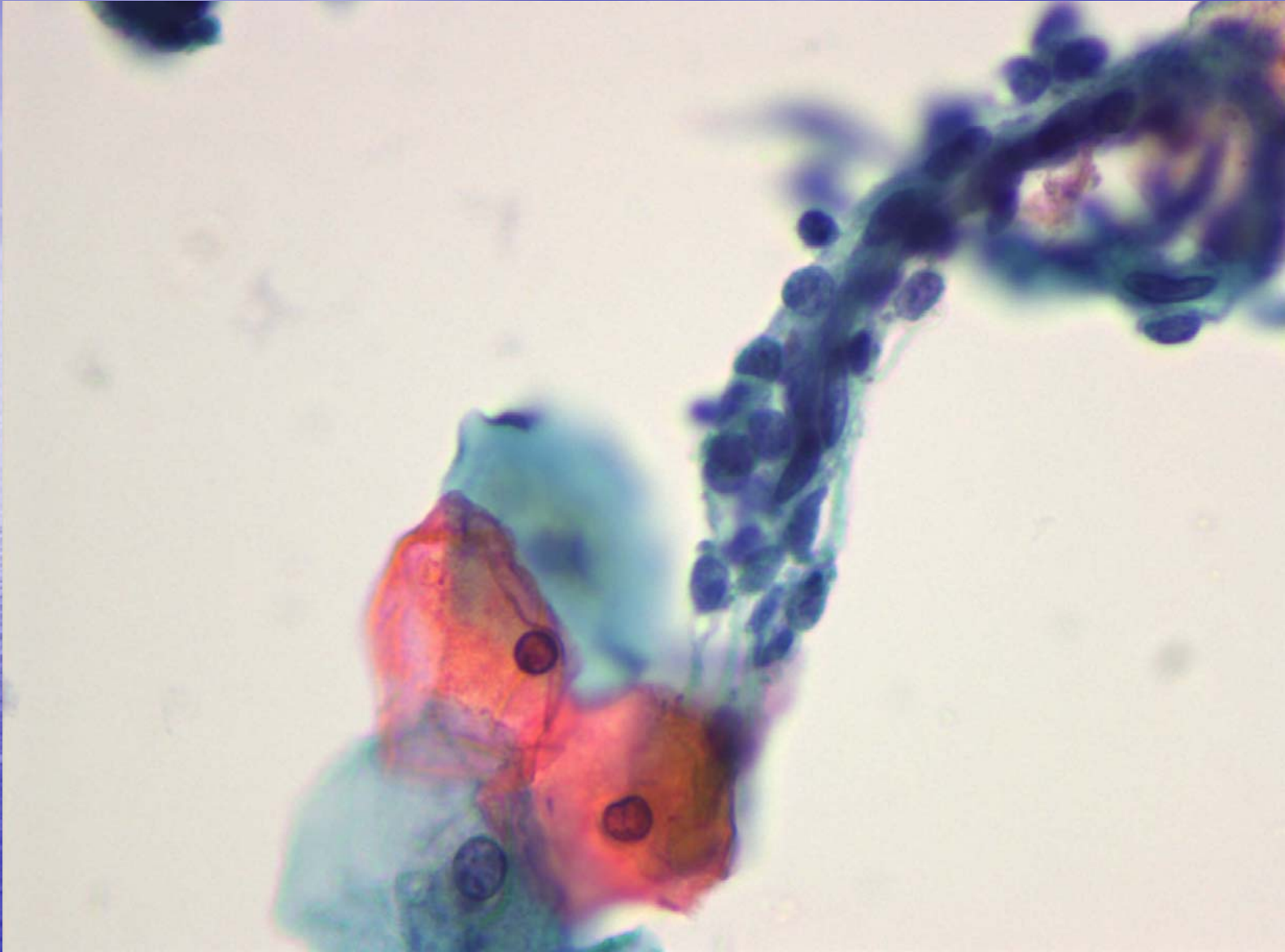


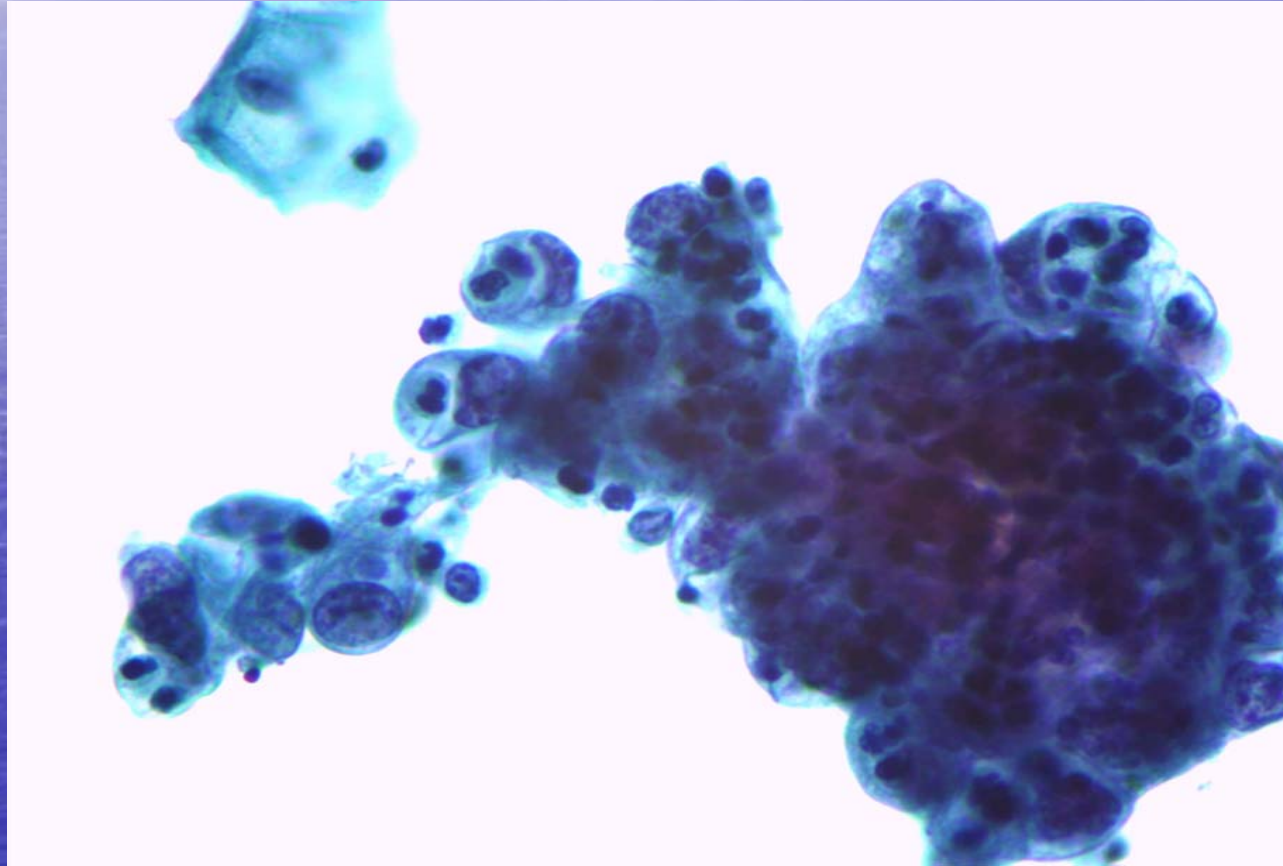


Loose groups of EM's

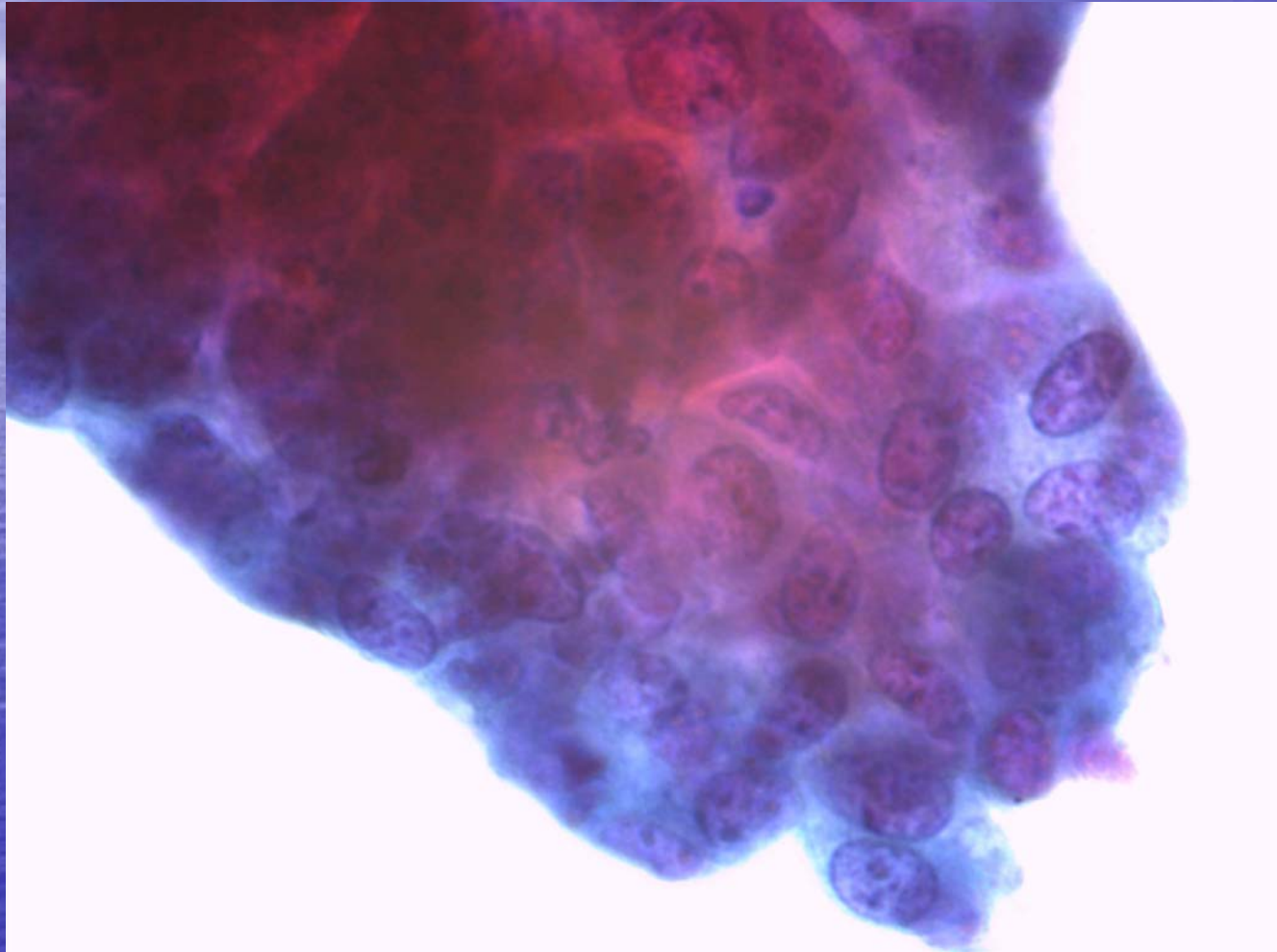


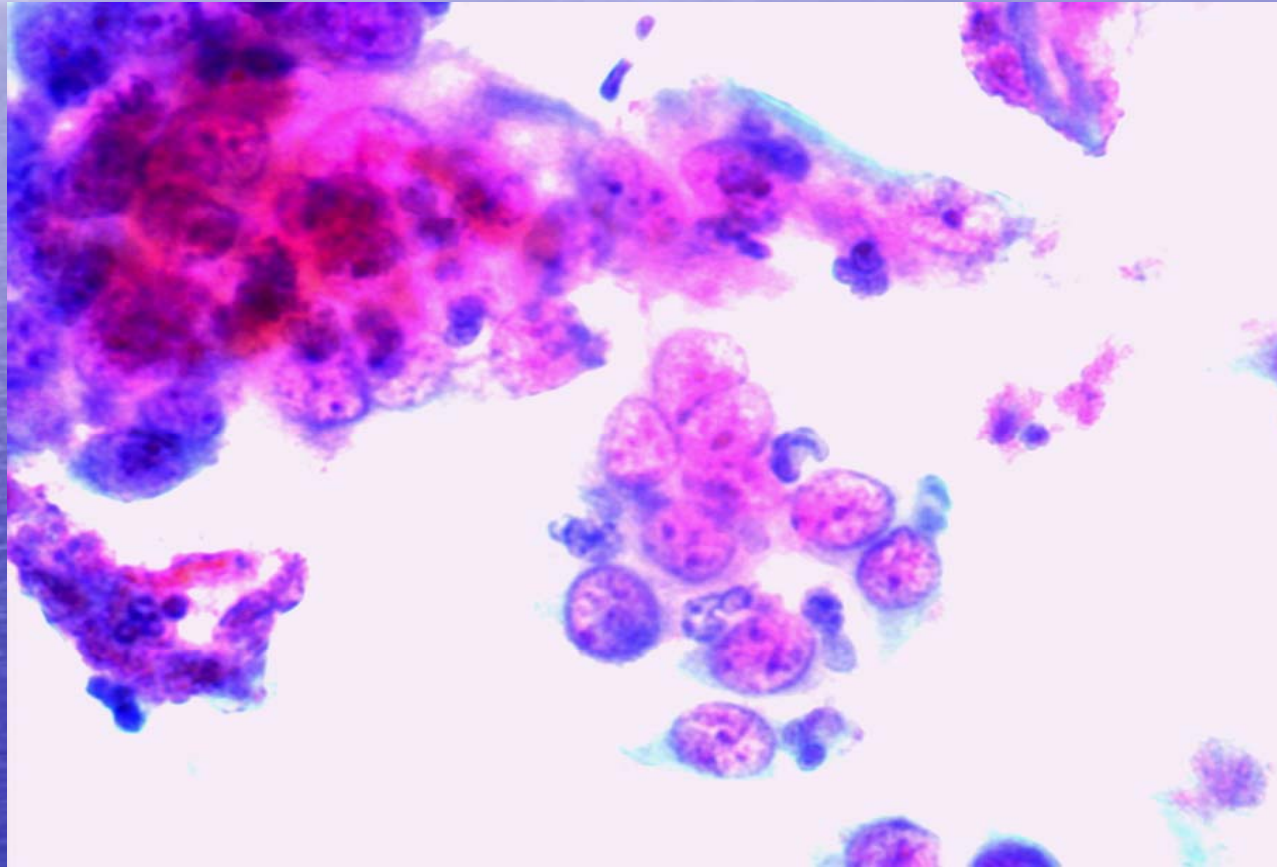


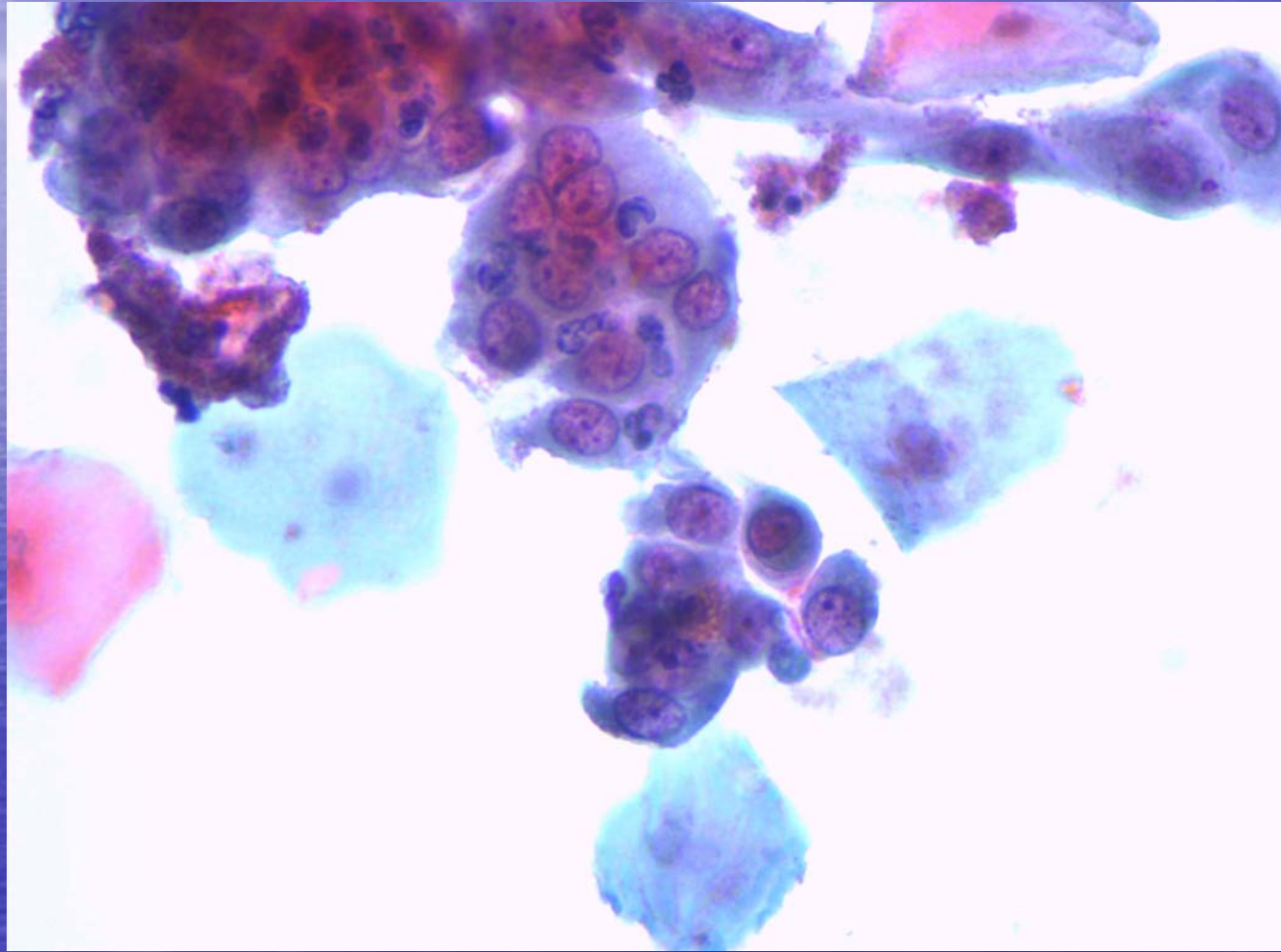


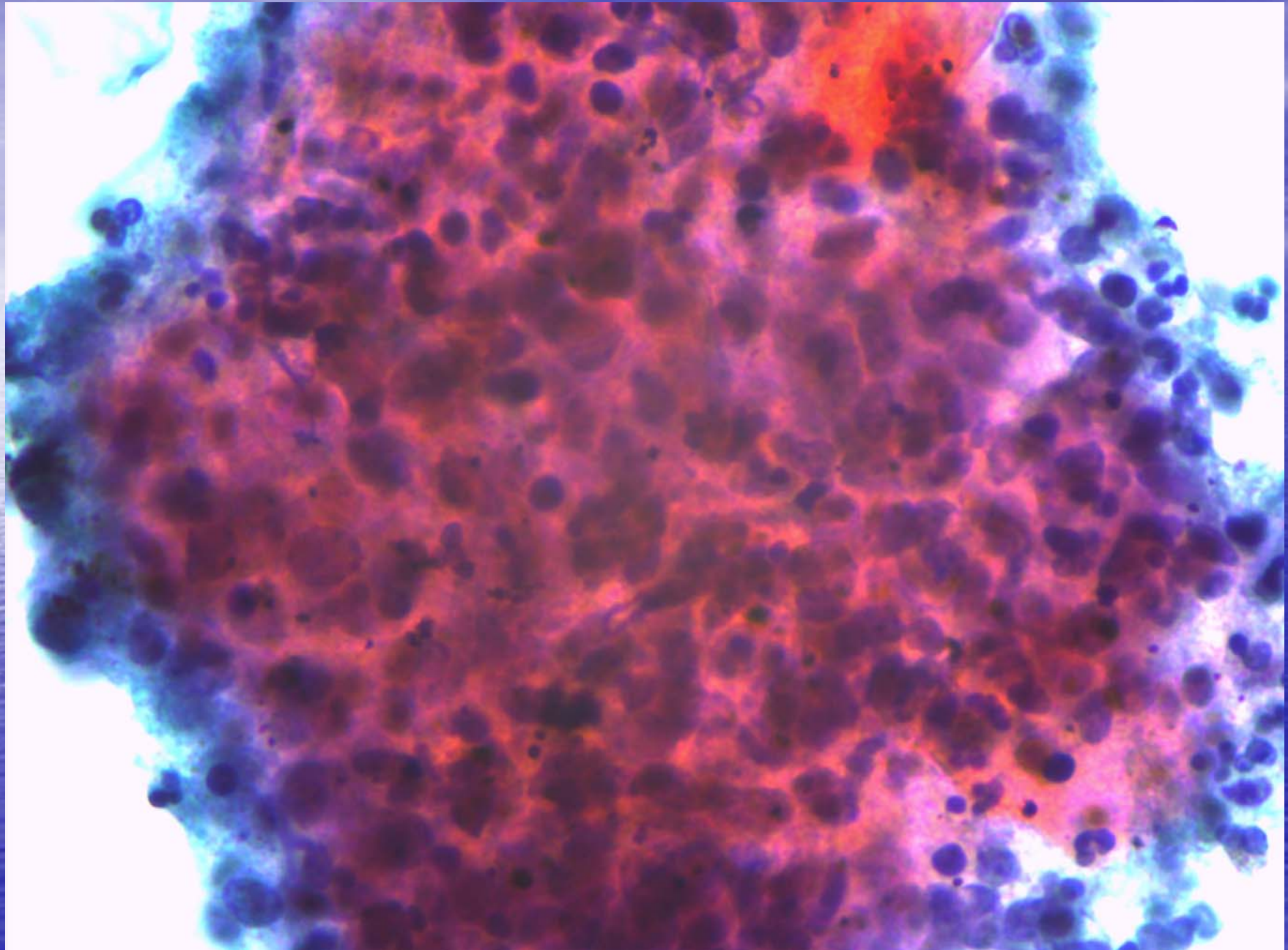


Odd metaplastic cells

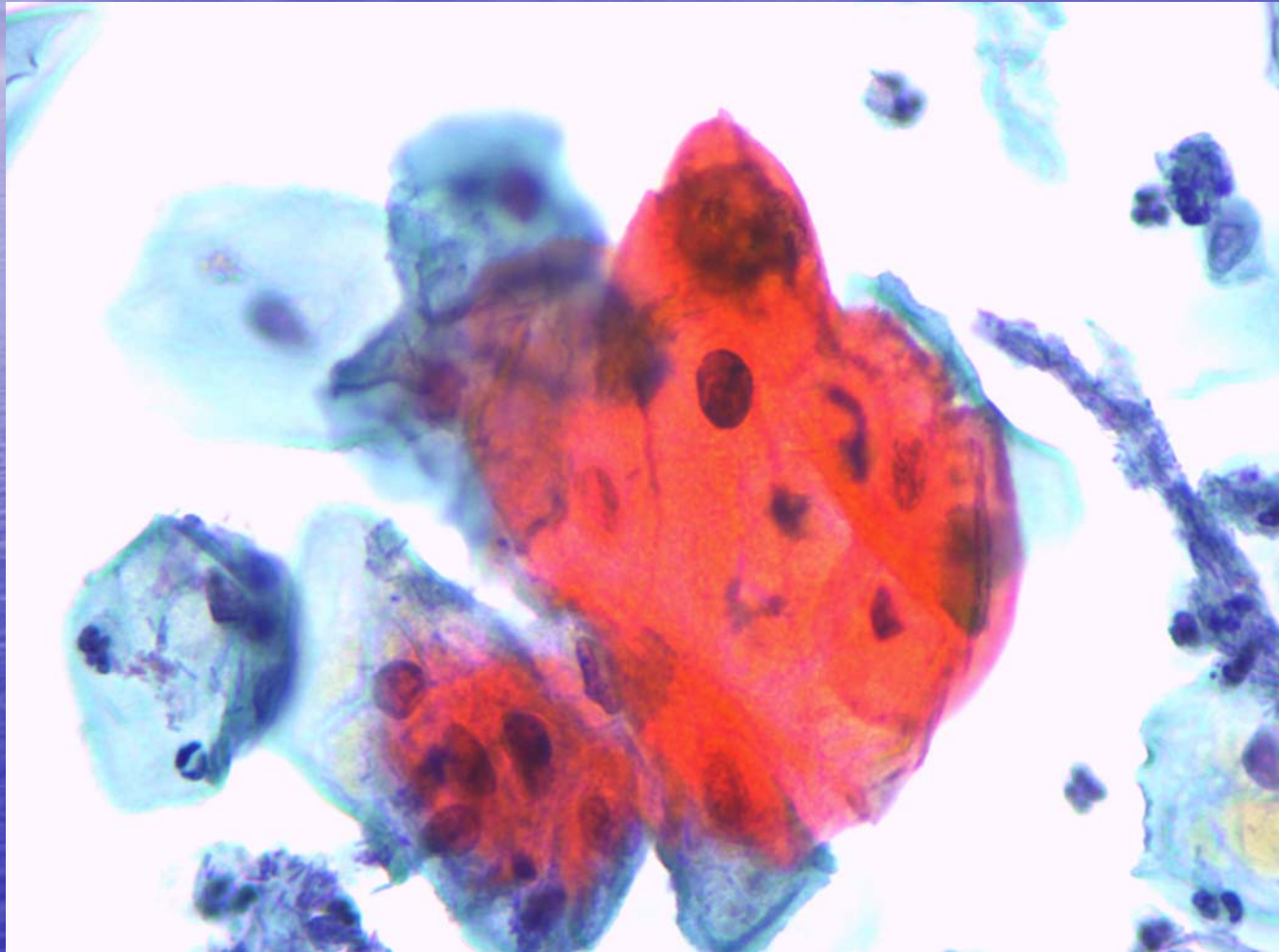




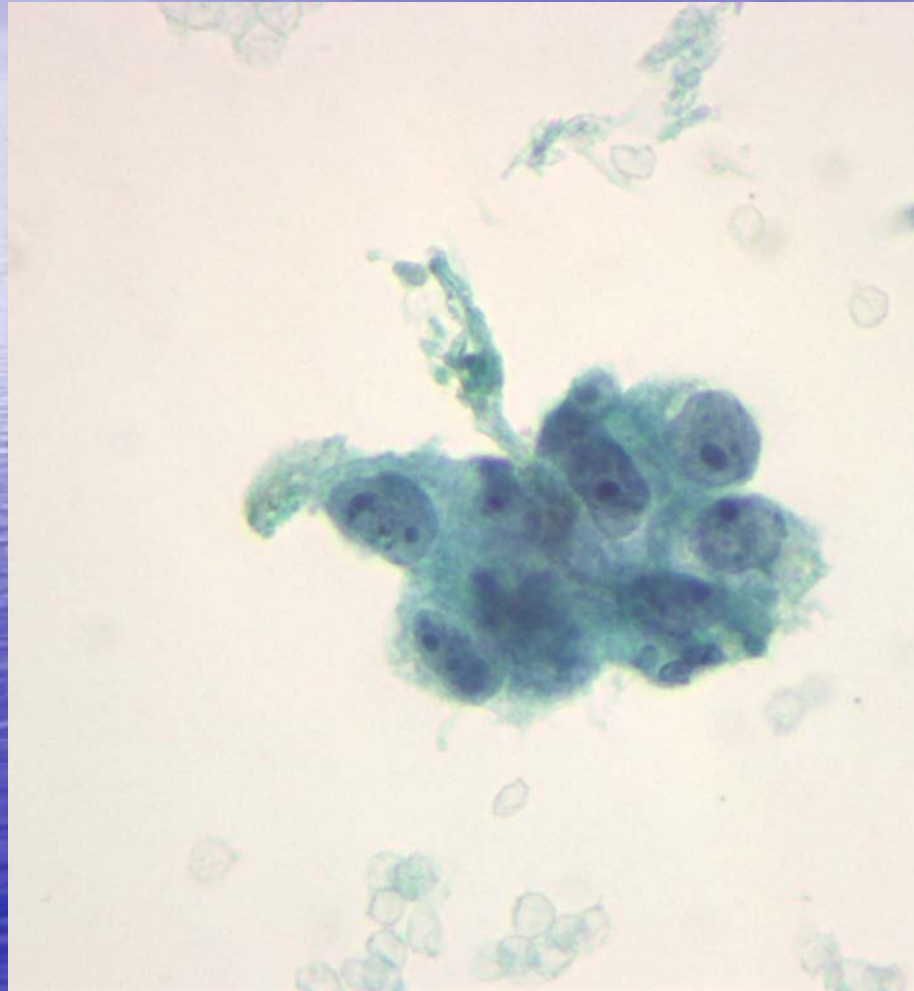




Superficial pattern



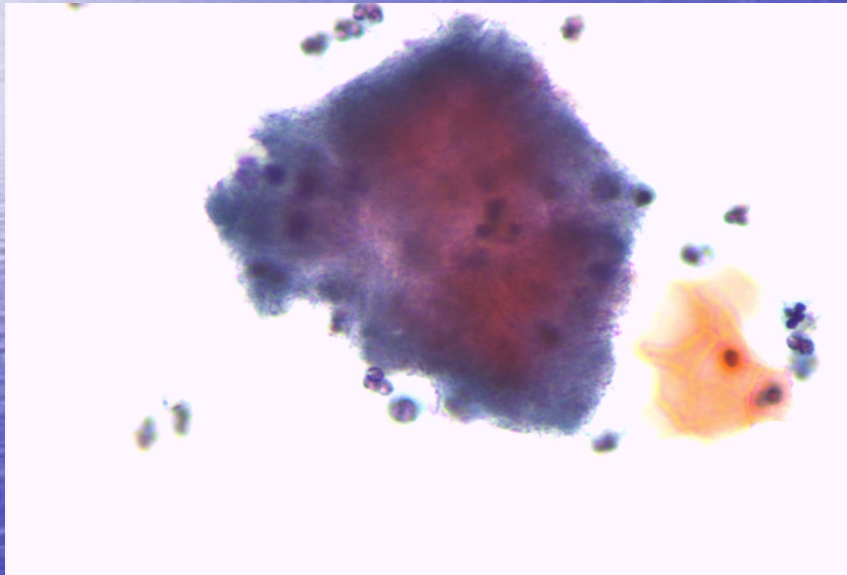
Recurrence



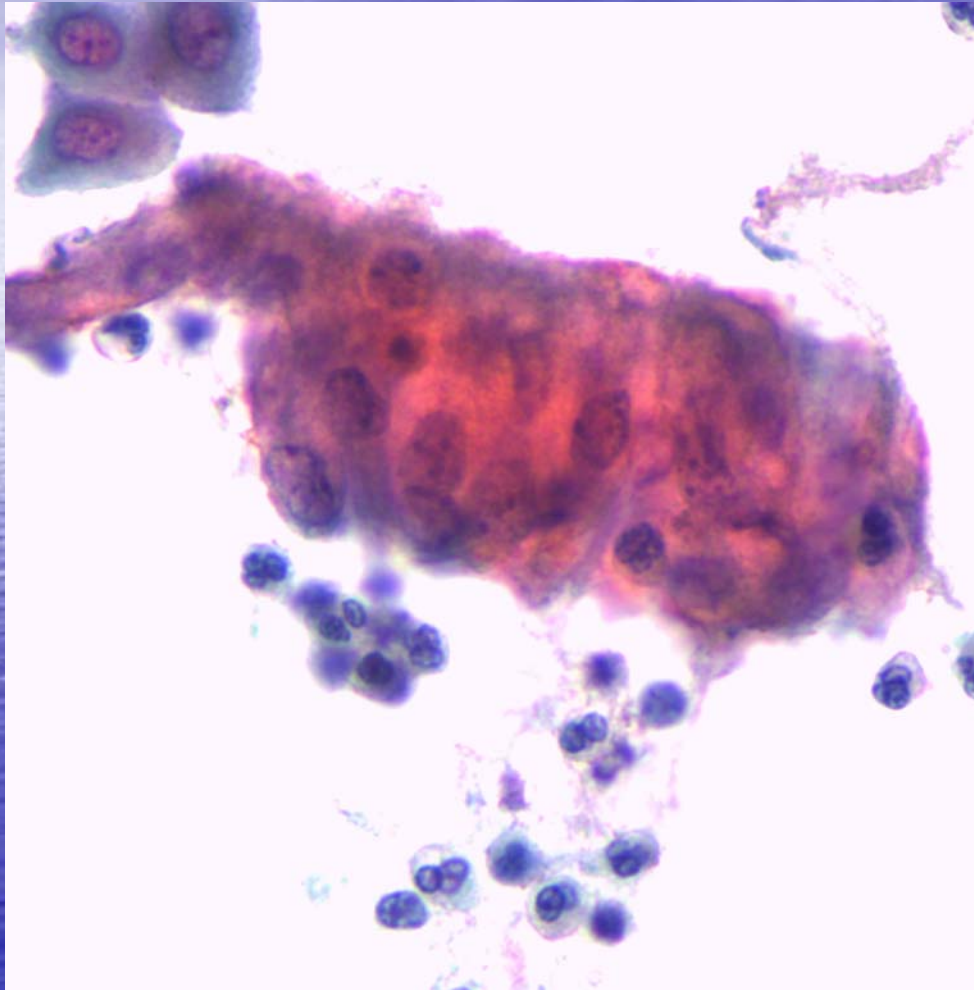
- Note blood
- Espositis treated
- Loose group of pleomorphic cells
- Prominent nucleoli

Inflammatory

- Actino repeatedly present in 1 case



Presence of endocervical cells



Probably represents
incomplete excision of
the endocervix

Is each case different?

- Case 1 10 samples
 - 6 had ALO and inflammation
 - Suture eventually removed for persistent discharge
 - EC's in 4
 - Never had any endometrial cells

- Case 2 - 3 samples
 - All 3 had difficult metaplastic cells

- Case 3 – 7 samples
 - All superficial
 - Never had any metaplastic or endometrial cells

- Case 4 - 3 samples
 - 6 months post treatment reported as BCE
 - Difficult, probably BC at worst. Could not have had recurrence at this point
 - 12 months post treatment negative
 - True negative
 - 18 months post treatment ? Glandular abnormality
 - Actually is invasive squamous carcinoma
 - Visible recurrence confirmed with histology on the same day

Role for HPV testing?

- Not included in TOC protocol
- But
 - A negative HPV would be reassuring
 - Would still need full follow up
 - Positive HPV should not precipitate overtreatment
- HPV may be useful to reassure cytopathologist about difficult groups

Guidance for clinical follow up

- Colposcopy follow up by specialist gynae oncologist
- Cytology samples only in combination with clinical review
- Cease recall on Exeter system
- 10 years follow up at first
- After that??

Cytology

- Single named cytopathologist to review
- High threshold for abnormality
- Mental checklist – could it be anything else?
- Multidisciplinary review before further treatment
- Happy to take referrals!