Evoluzione delle lesioni L-SIL / CIN1

Dr Francesco Sopracordevole
SOC di Ginecologia Oncologica
Centro di Riferimento Oncologico di Aviano
www.sopracordevole.it

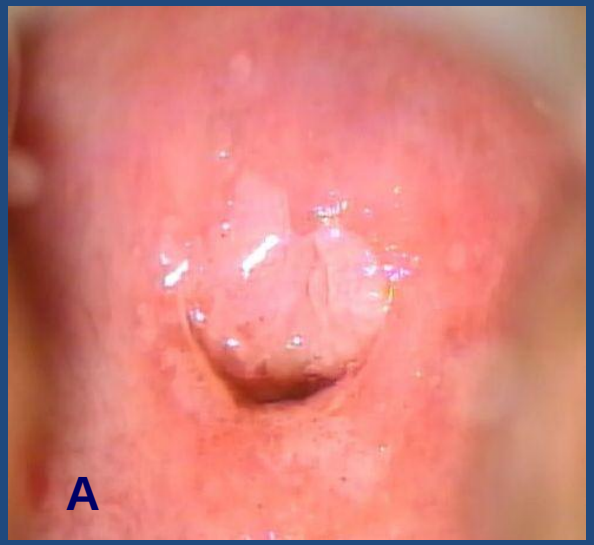
Limits of the studies on CIN1

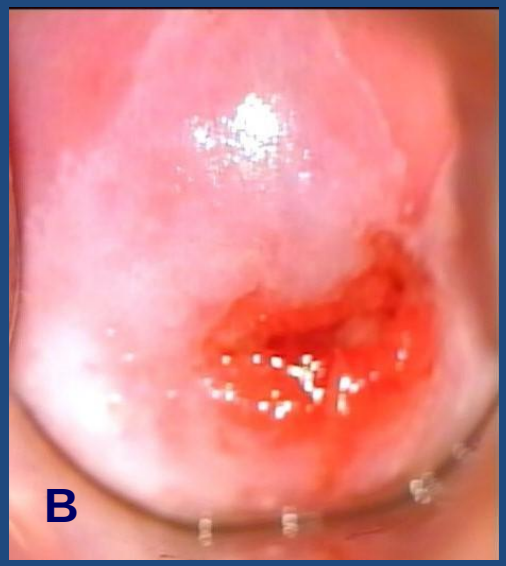
cytology

Cyto-histological correlation

histology

Bioptic "therapy"





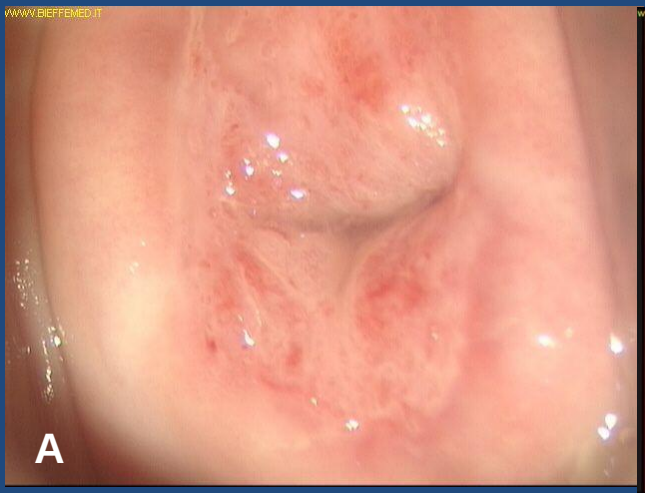
grading and extension of colposcopic lesion

Multiple biopsies are performed to avoid uderdiagnosis : increase in "bioptic therapy"

Studies about natural history of CIN1:

Reliability of cytology → reliability of colposcopy → satisfactory colposcopy or not
where perform biopsy, and
how many biopsies to perform,

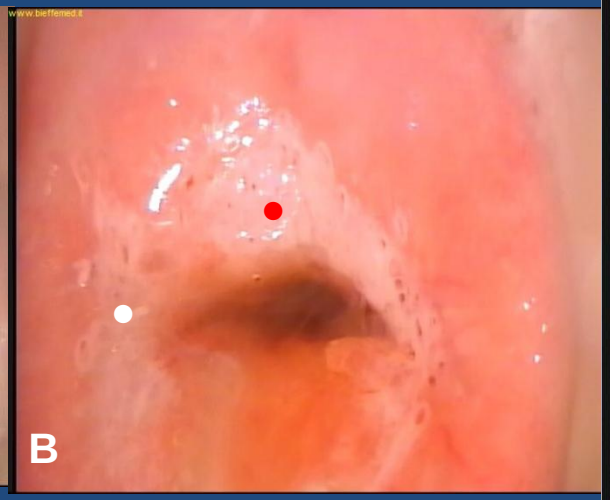
Reliability of histology



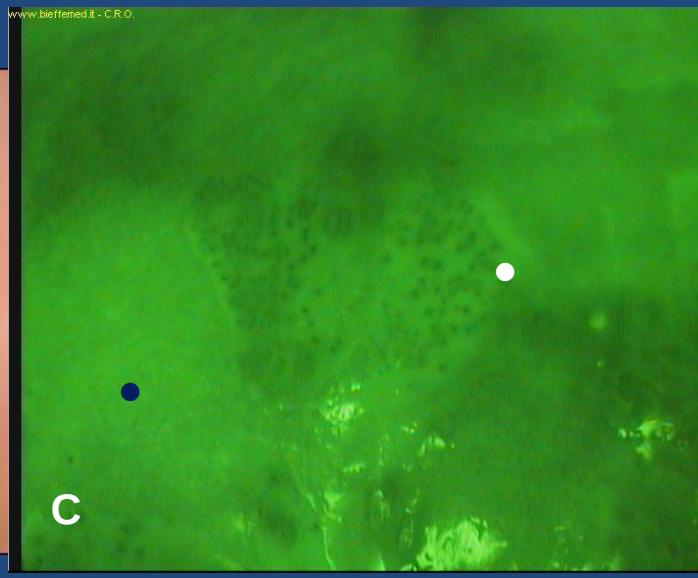
39y, PT: 3y persitent L-SIL
Unsatisfactory colpscopy

Cone biopsy:

CIN1 + ADCA pT1A1



- **biopsy: CIN1**
- **biopsy CIN2**



- **biopsy : CIN1**
- **biopsy : CIN3**

Reported data:

- **Regression of CIN1** **up to 60 - 80 %**
- **Progression of CIN1** **up to 10 - 20 %**

Factors involved in the natural history of CIN1:

- **Type of HPV involved:** **HR-HPV 16/18**
  Non 16/18
  LR-HPV

- **Expression of p16 /Ki-67/ methilation….**

- **Age**

- **Congenital or acquired immunosuppression**

- **Cigarette smoke**

- **Other infections (Gardnerella, Trichomonas, HSV etc)**

RISK OF PROGRESSION RELATED TO PERSISTENCE

PROGRESSION OF CIN1

Author	N°	CIN3+
Pretorius, AJOG 2006	2490	1.9%
HR-HPV+		2.3%
HR-HPV-		0.4%
>30y		2.7%

Women with persistent HRHPV and negative cytology DON'T increase their risk of CIN3+ with increase in lenght of follow-up

	N°	CIN2+	
Bansal,	680: 6 mo	45, 6,6 %	
Anticancer Res 2008	513 : 12 mo	+ 19, 3.7 %	(cumulative: 10.3 %)
	251, 6 mo –	9, 3.6 %	
	262, 6 mo +	10, 3.8 %	

PROGRESSION OF CIN1 and p16 – ki 67 expression

Charoonwatane, APJCP 2019	CIN1 → CIN3	7/108	6.4 %
	CIN1 p16+→	4/24,	16.7 %
	CIN1 p16- →	3/84	3.6 %

PROGRESSION OF CIN1

	CIN1	Regression 4y	persistence 4y	CIN3 4y
Bruno, 2021 Inf Dis Ob Gyn	475	426 (89.7%)	42 (8.8ersi%)	7 (1.5%)

7 CIN3, among 61 women with persistence at 24 mo (7/61, 11,5%)

Regression: (Cumulative)	1y	46,3%	Progression:	1y	0
	2y	80.8%		2y	4
	3y	85,1%		3y	3
	4y	89,7%		4y	0

PROGRESSION OF CIN1 and 5y folllow-up

Author	N°	CIN2+		CIN3		Cancer
Ciavattini, BMJ Open, 2018	434	32	7.4 %	4	0.9 %	0
at inclusion:						
L-SIL	398	19	4.5 %			
HSIL	36	13	33.3 %			
colpo G1	398	25	6.3 %			
colpo G2	36	7	19.4 %			
no-smokers	317	17	5.4 %			
smokers	117	15	12.8 %			

5 y regression: 91.2 %

5 y persistence: 1.4 %

5y progression: 7.4 % (cumulative)

Take home messages

- CIN1 mostly regress, progress to CIN3 lesion in less than 3 % of case

- Progress to CIN3 is restricted to persistent lesions

- Follow up of CIN1 is preferable (Guidelines, Recommendation, Protocols)

- 24 mo follow-up is indicated after reliable diagnostic process and reliable follow-up

- Long term follow-up (up to 4-.5 y) of CIN1 may be safe if:

  - satisfactory colposcopy / G1 colposcopic picture
  - L-SIL at inclusion

  - NON smokers women / immunecompetent women

- Treatment of CIN1 if:
  - unsatisfactory colposcopy
  - persistent disease at 24 mo at least
  - histology-colposcopic inconsistency

- No EBM on biomarkers (p16, Ki67, metilation) to manage women with CIN1


Thank for your attention !