

The value of the IFCPC nomenclature in colposcopy practice

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Disclosures

- Elise de Castro Hillmann and Djamal Berbiche
 - No financial relationships or conflict of interest to disclose
- Omar Moreira Bacha
 - Merck: paid speaker



Introduction

- IFCPC Nomenclature ¹
 - tool
 - help interpretations of the colposcopy findings
 - predicting the histological findings
 - ensuring that guided biopsies are taken from the worse lesion areas
- standardized terminology
 - scientific research and further comparisons

1. Bornstein, J., et al., *2011 colposcopic terminology of the International Federation for Cervical Pathology and Colposcopy*. Obstet Gynecol, 2012. **120**(1): p. 166-72.



Introduction

- Colposcopy diagnosis

?

IFCPC nomenclature

Feeling



Which one agrees better with histology:
the colposcopist's feeling or the IFCPC nomenclature?



Methods

- Hôpital Charles Le-Moyne, QC, Canada
- Experienced colposcopists (+10y experience)
- n=912
 - Live colposcopy
 - n=228
 - Static colposcopic image evaluations ²⁻⁵
 - n=684
 - All photographs were classified as adequate for evaluation

2. Hammes, L.S., et al., *Value of the International Federation for Cervical Pathology and Colposcopy (IFCPC) Terminology in predicting cervical disease*. J Low Genit Tract Dis, 2007. **11**(3): p. 158-65.

3. Jeronimo, J., et al., *Interobserver agreement in the evaluation of digitized cervical images*. Obstet Gynecol, 2007. **110**(4): p. 833-40.

4. Liu, A.H., et al., *Comparison of Colposcopic Impression Based on Live Colposcopy and Evaluation of Static Digital Images*. J Low Genit Tract Dis, 2016. **20**(2): p. 154-61.

5. Massad, L.S., J. Jeronimo, and M. Schiffman, *Interobserver agreement in the assessment of components of colposcopic grading*. Obstet Gynecol, 2008. **111**(6): p. 1279-84.



Methods

- Colposcopist feeling/impression= Colposcopy diagnosis (report)
- IFCPC Nomenclature= accordingly to the colposcopic findings
 - Most serious characteristic

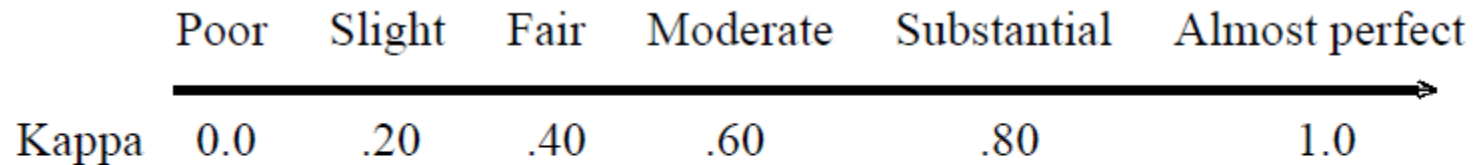


Methods

- Colposcopy diagnosis and IFCPC Nomenclature diagnosis
 - Normal/Benign
 - Low Grade
 - High Grade
 - Cancer



Kappa interpretation



<u>Kappa</u>	<u>Agreement</u>
< 0	Less than chance agreement
0.01–0.20	Slight agreement
0.21– 0.40	Fair agreement
0.41–0.60	Moderate agreement
0.61–0.80	Substantial agreement
0.81–0.99	Almost perfect agreement

1. Viera, A.J. and J.M. Garrett, *Understanding interobserver agreement: the kappa statistic*. Fam Med, 2005. **37**(5): p. 360-3.



Results



Agreement	Weighted Kappa	Confidence Interval
Colposcopist diagnosis vs IFCPC Nomenclature diagnosis	K=0.7784	0.7435-0.8134
Only adequate colposcopies		
Colposcopist diagnosis vs IFCPC Nomenclature diagnosis	K=0.8000	0.7636-0.8365

All cases were classified in 4 categories: Normal/Benign, Low Grade, High Grade and Cancer

Substantial agreement



Agreement with histology	Weighted Kappa	Confidence Interval
Colposcopist diagnosis	K=0.2917	0.2310-0.3523
IFCPC Nomenclature diagnosis	K=0.2765	0.2183-0.3347
Only adequate colposcopies		
Colposcopist diagnosis	K=0.2839	0.2172-0.3505
IFCPC Nomenclature diagnosis	K=0.2597	0.1958-0.3236

All cases were classified in 4 categories: Normal/Benign, Low Grade, High Grade and Cancer

Fair agreement



Discussion

- Substantial agreement between colposcopist feeling and IFCPC nomenclature.
 - 4 categories: Normal/Benign, Low Grade, High Grade, Cancer
- Both diagnosis (colposcopist feeling and IFCPC nomenclature) presented only a fair agreement with histology.
 - 4 categories: Normal/Benign, Low Grade, High Grade, Cancer
 - 2002 IFCPC Nomenclature ²
 - High grade: Sensitivity 61.1%, Specificity 94.4%

2. Hammes, L.S., et al., *Value of the International Federation for Cervical Pathology and Colposcopy (IFCPC) Terminology in predicting cervical disease*. J Low Genit Tract Dis, 2007. 11(3): p. 158-65.



Discussion

- The colposcopy adequacy does not improve colposcopy agreement with histology.
 - One of the changes in the last terminology (previous satisfactory/unsatisfactory) ^{1,6}
 - Is adequacy assessment really necessary?

1. Bornstein, J., et al., *2011 terminology of the vulva of the International Federation for Cervical Pathology and Colposcopy*. J Low Genit Tract Dis, 2012. **16**(3): p. 290-5.

6. Quaas, J., et al., *Explanation and Use of the Colposcopy Terminology of the IFCPC (International Federation for Cervical Pathology and Colposcopy) Rio 2011*. Geburtshilfe Frauenheilkd, 2013. **73**(9): p. 904-907.



Discussion

- Colposcopy new role ⁷
 - New cervical cancer prevention programs
 - Impact of HPV Vaccine
 - Rarer lesions
 - How new colposcopists will be trained?



7. Schiffman, M. and N. Wentzensen, *Issues in optimising and standardising the accuracy and utility of the colposcopic examination in the HPV era*. Ecancermedalscience, 2015. 9: p. 530.



Discussion

- Maybe IFCPC colposcopy recommendations should be focus on:
 - Simplify nomenclature ⁷
 - Systematic multiple biopsies ⁸⁻¹⁰
 - Triage of invasive lesions
 - Ensure faster histological diagnoses
 - Ensure faster treatment



7. Schiffman, M. and N. Wentzensen, *Issues in optimising and standardising the accuracy and utility of the colposcopic examination in the HPV era*. Ecancermedalscience, 2015. **9**: p. 530.

8. Pretorius, R.G., et al., *Regardless of skill, performing more biopsies increases the sensitivity of colposcopy*. J Low Genit Tract Dis, 2011. **15**(3): p. 180-8.

9. Wentzensen, N., et al., *Multiple biopsies and detection of cervical cancer precursors at colposcopy*. J Clin Oncol, 2015. **33**(1): p. 83-9.

10. Gage, J.C., et al., *Detection of cervical cancer and its precursors by endocervical curettage in 13,115 colposcopically guided biopsy examinations*. Am J Obstet Gynecol, 2010. **203**(5): p. 481 e1-9.





Thank You

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