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阴道镜及宫颈活组织检查对早期宫颈上皮内瘤变诊断价值分析*

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摘要 目的:探究阴道镜及宫颈活组织检查对早期宫颈上皮内瘤变(cervical intraepithelial neoplasia, CIN)的诊断价值。**方法:**选择2015年3月至2018年5月于我院接受诊治的543例疑似宫颈上皮瘤变患者,分别对其实施阴道镜及宫颈活组织检查,以病理学检测结果为金标准,分别评估两种方式单独检测及联合检测对早期CIN的诊断一致性、灵敏度和特异度,并进行组间对比。**结果:**(1)543例疑似CIN患者病理诊断早期CIN阳性患者168例,阴性患者375例,诊断率为30.94%;阴道镜对早期CIN诊断发现阳性患者有143例,良性患者有400例,诊断率为26.34%;宫颈活组织检测对早期CIN诊断发现阳性患者有159例,良性患者有384例,诊断率为29.28%;阴道镜联合宫颈活组织检测对早期CIN诊断发现阳性患者有163例,良性患者有380例,诊断率为30.02%。(2)检测发现,阴道镜对早期CIN诊断一致性为81.77%,灵敏度为60.12%,特异度为91.47%。(3)宫颈活组织对早期CIN诊断一致性为91.71%,灵敏度为83.33%,特异度为95.47%。(4)阴道镜联合宫颈活组织对早期CIN诊断一致性为96.50%,灵敏度为92.86%,特异度为98.13%。(5)联合检测对早期CIN诊断的一致性、灵敏度和特异度均明显优于阴道镜及宫颈活组织单独检测。**结论:**阴道镜及宫颈活组织检测对早期CIN具有较好的诊断效果,但联合检测诊断准确率更高,适用于早期CIN临床筛查中。

关键词:阴道镜;宫颈活组织;早期宫颈上皮内瘤变;诊断价值;分析

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Diagnostic Value of Colposcopy and Cervical Biopsy for Early Cervical Intraepithelial Neoplasia*

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ABSTRACT Objective: To investigate the diagnostic value of colposcopy and cervical biopsy for early cervical intraepithelial neoplasia (CIN). **Methods:** 543 patients with suspected cervical epithelial tumors who were treated in our hospital from March 2015 to May 2018. For the study subjects, colposcopy and cervical biopsy were performed respectively, and the results of pathological examination were used as the gold standard. The consistency, sensitivity and specificity of the two methods of single detection and combined detection for early CIN were evaluated and performed. Comparison between groups. **Results:** (1) 543 patients with suspected CIN were diagnosed with 168 early CIN-positive patients and 375 negative patients, the diagnosis rate was 30.94%. Colposcopy was positive for early CIN diagnosis in 143 patients and benign patients in 400 cases, the diagnosis rate was 26.34%. Cervical biopsy showed 159 positive CIN patients and 384 benign patients, the diagnosis rate was 29.28%. Colposcopy combined with cervical biopsy detected 163 positive CIN patients and 380 benign patients, the diagnosis rate was 30.02%. (2) The consistency of colposcopy for early CIN diagnosis was 81.77%, the sensitivity was 60.12%, and the specificity was 91.47%. (3) The consistency of cervical biopsy for early CIN was 91.71%, and the sensitivity was 83.33%. The degree was 95.47%. (4) the consistency of colposcopy combined with cervical biopsy for early CIN was 96.50%, the sensitivity was 92.86%, and the specificity was 98.13%. (5) The consistency and sensitivity of combined detection for early CIN diagnosis Obviously better than colposcopy and cervical biopsy. **Conclusion:** Colposcopy and cervical biopsy have a good diagnostic effect on early CIN, but the combined detection has a higher accuracy and is suitable for early CIN clinical screening.

Key words: Colposcopy; Cervical biopsy; Early cervical intraepithelial neoplasia; Diagnostic value; Analysis

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前言

宫颈癌是妇科常见恶性肿瘤之一,其发病率仅次于乳腺癌,随着近些年居民生活方式的改变,其发病率逐年上升,全球每年新增患者约为 50 万例,死亡例数约为 23.1 万例,我国每年宫颈癌新发病例高达 13.15 万,其发病率与死亡率均位居国内女性恶性肿瘤之首^[1-3]。病毒感染、多次分娩、吸烟等因素都可能会诱发宫颈癌,患者早期症状不明显,多数在发现时已发展至中后期。治疗主要包括手术治疗、化学治疗与放射治疗等^[4,5],早期对宫颈癌的诊断及干预是提高患者预后的重要手段,对制定个体化治疗方案也具有重要意义^[6]。宫颈上皮内瘤变(cervical intraepithelial neoplasia, CIN)是一组与宫颈浸润癌密切相关的癌前病变的统称,主要包括宫颈不典型增生和宫颈原位癌等,一般来说宫颈癌的病理变化遵循如下规律:宫颈不典型增生-原位癌-早期浸润癌-浸润癌,对 CIN 的鉴别有助于改善宫颈癌患者预后^[7,8]。宫颈活细胞检测、阴道镜、阴道镜下活组织病理检测是目前宫颈癌筛查的三阶梯技术^[9,10],目前临床上关于阴道镜与宫颈活组织对 CIN 诊断价值的分析研究较少,本文作者通过探究发现,阴道镜及宫颈活组织检测对早期 CIN 具有较好的诊断效果,但联合检测诊断准确率更高,适用于早期 CIN 临床筛查中。

1 资料与方法

1.1 一般资料

选择 2015 年 3 月至 2018 年 5 月于我院接受诊治的 543 例疑似宫颈上皮瘤变患者,年龄 34-63 岁,平均年龄(43.06±3.26)岁。

纳入标准:(1)能够配合调研;(2)病历齐全;(3)经医院伦理学会批准;(4)患者对本研究的流程清楚。

排除标准:(1)合并精神疾患者;(2)妊娠或哺乳期女性;(3)合并严重肝肾功能障碍者;(4)合并其他恶性肿瘤者;(5)既往宫颈病变或宫颈癌病史者;(6)无完整宫颈者。

1.2 方法

分别对入组对象实施阴道镜及宫颈活组织检测,阴道镜方式如下:术前 24 h 禁止性生活及阴道用药,选择南京贝登医疗股份有限公司生产的 iHC3A 型电子阴道镜对入组患者实施阴道镜检查,操作由本院经验丰富的医师负责,首先使用棉签擦拭干净宫颈表面及阴道内分泌物,涂生理盐水后观察鳞柱交界处及血管,再于宫颈表面湿敷 5%冰醋酸棉球 60 s 后镜下观察;宫颈活组织检测:使用活检钳取可疑病变区域 0.2-0.4 cm 大小的组织块送往病理检测。

1.3 观察指标及评测标准

分别就两种检测方式对早期 CIN 的诊断价值进行探究,其中阴道镜检测阳性标准参照 1990 年第七次世界宫颈病理及阴道镜国际联盟大会的确定,即异常阴道镜像为醋酸白色上皮、白斑、点状血管等^[10];病理学检测标准直接参照第六版《病理学》诊断标准^[11]。

1.4 统计学方法

应用 SPSS 19.0,计数资料以(%)表示,采用卡方检验,计量资料以($\bar{x} \pm s$)表示,采用 t 检验, $P < 0.05$ 有统计学意义。诊断

价值的评估:灵敏度 = 真阳性 / (真阳性 + 假阴性);特异度 = 真阴性 / (假阳性 + 真阴性);一致性 = (真阳性 + 真阴性) / (真阳性 + 假阴性 + 假阳性 + 真阴性)。

2 结果

2.1 不同方法对早期 CIN 诊断结果

经评估发现,543 例疑似 CIN 患者病理诊断早期 CIN 阳性患者 168 例,阴性患者 375 例,诊断率为 30.94%,阴道镜对早期 CIN 诊断发现阳性患者有 143 例,良性患者有 400 例,诊断率为 26.34%;宫颈活组织检测对早期 CIN 诊断发现阳性患者有 159 例,良性患者有 384 例,诊断率为 29.28%;阴道镜联合宫颈活组织检测对早期 CIN 诊断发现阳性患者有 163 例,良性患者有 380 例,诊断率为 30.02%。

2.2 阴道镜检测结果

经评估发现,阴道镜对早期 CIN 诊断的一致性为 81.77%(444/543),灵敏度为 60.12%(101/168),特异度为 91.47%(343/375),见表 1。

表 1 阴道镜对早期 CIN 诊断价值分析

Colposcopy	Gold standard	
	positive (n=168)	negative (n=375)
Positive(n=143)	101	32
Negative(n=400)	67	343

2.3 宫颈活组织检测

经检测发现,宫颈活组织对早期 CIN 诊断一致性为 91.34%(496/543),灵敏度为 83.33%(140/168),特异度为 94.93%(356/375),见表 2。

表 2 宫颈活组织对早期 CIN 诊断价值分析

Table 2 Analysis of the value of cervical biopsy in the diagnosis of early CIN		
Cervical biopsy	Gold standard	
	positive (n=168)	negative (n=375)
Positive(n=159)	140	19
Negative(n=384)	28	356

2.4 联合检测价值分析

经分析发现,阴道镜联合宫颈活组织检测对早期 CIN 诊断一致性为 96.50%(524/543),灵敏度为 92.86%(156/168),特异度为 98.13%(368/375),见表 3。

2.5 不同检测方式诊断价值对比

经评估对比发现,联合检测对早期 CIN 诊断的一致性、灵敏度和特异度均优于阴道镜及宫颈活组织单独检测,见表 4。

3 讨论

宫颈癌是发病率仅次于乳腺癌的女性恶性肿瘤,全球每年新发宫颈癌约有 53 万例,占有癌症发病例数的 5%^[12],数据显示,美国 2013 年度宫颈癌病例数为 1.2 万例,死亡 4000 例,而发展中国家宫颈癌发病率及死亡率显著高于发展国家^[13,14]。

表 3 阴道镜联合宫颈活组织对早期 CIN 诊断价值分析

Table 3 Analysis of the value of colposcopy combined with cervical biopsy in the diagnosis of early CIN

Joint detection	Gold standard positive(n=168)	Gold standard negative(n=375)
Positive(n=163)	156	7
Negative(n=380)	12	368

表 4 不同检测方式诊断价值对比(%)

Table 4 Comparison of Diagnostic Values of Different Detection Methods (%)

Detection method	Consistency	Sensitivity	Specificity
Colposcopy	81.77	60.12	91.47
Cervical biopsy	91.71	83.33	95.47
Joint detection	96.50	92.86	98.13

调研指出,我国每年约有 13 万例的新发宫颈癌病例,居我国妇女恶性肿瘤第一位,约占全球新发病例数的 30 %,仅次于智利^[15,16]。近些年随着居民生活方式的改变及饮食结构的调整,宫颈癌呈现年轻化趋势,给女性身心健康带来较大的威胁,临床实践指出,早期对宫颈癌的诊断和鉴别对后期治疗具有重要意义,因而早期对宫颈癌的排查能够为提高女性生活质量打下良好基础^[17,18]。目前宫颈癌早期筛查手段较为多样,包括对宫颈筛查方式较多,包括病理学检测、液基细胞学检测、HPV 分型基因检测、阴道镜检查、宫颈活组织检测等,其中病理学检测虽然准确率高,但评测周期较长,HPV 分型检测价格昂贵,上述检测方式应用受到一定限制^[19,20]。

阴道镜及宫颈活组织检测实施简便、可重复性高,目前已成为宫颈癌筛查的重要手段,在外阴疾病诊断、宫颈病变、异常新生物评估等鉴别诊断中均具有较好的应用前景^[21]。学者 Hebbbar A^[22]通过对 40 例高度怀疑宫颈癌性病变患者实施电子阴道镜检测发现,对 CIN 及以上级别宫颈癌检出率上,TCT 检出率仅为 14.5 %,TCT 联合 HR-HPV 检测检出率为 20.0 %,而联合电子阴道镜后检出率提高至 35.0 %,相比于单独 TCT 检测及 TCT 联合 HR-HPV 检测,加用电子阴道镜确实提高了宫颈癌前病变及宫颈癌的诊断准确率^[23]。学者 Baloch Z^[24]通过对 1287 例宫颈病变患者实施检测发现,就宫颈涂片检查巴氏 II 级及以上患者实施阴道镜及病理组织检查,能够及时发现癌前病变,提高宫颈癌早期诊断的准确率。宫颈活组织检测是一种适用于宫颈炎症可疑为恶性病变或特异性感染者的诊断方式,通过取部分病变活组织并实施病理检测的方式,在宫颈早期病变筛查中也具有较高的应用率^[25,26]。同样研究发现^[27],宫颈活组织检测能够更为准确和直观的反映患者病情状况,诊断准确性更高,且能够缩短诊断时间,对制订治疗方案具有重要参考意义。学者的研究也指出^[28],对孕产妇实施宫颈活组织检测有助于提高其子宫癌及癌前病变的筛查率,对贯彻我国优生优育政策具有重要意义。

我们通过对 543 例疑似宫颈上皮内瘤变患者分别实施阴道镜及宫颈活组织检测的方式,就上述两种方式对早期 CIN 诊断价值进行了对比分析,结果显示,阴道镜对早期 CIN 诊断一致性为 81.77 %,灵敏度为 60.12 %,特异度为 91.47 %,宫颈活组织对早期 CIN 诊断一致性为 91.71 %,灵敏度为 83.33 %,特异度为 95.47 %,阴道镜联合宫颈活组织对早期 CIN 诊断一致性为 96.50 %,灵敏度为 92.86 %,特异度为 98.13 %。不同诊断方式相对比显示,单纯阴道镜与单纯宫颈活组织检测对早期 CIN 诊断一致性、灵敏度及特异度对比无差异,而阴道镜联合宫颈活组织检测对早期 CIN 诊断一致性、灵敏度及特异度则明显要优于任一种单独检测。这与学者 Andrea Ciavattini^[29]等的研究结果相类似,该学者通过对 499 例经宫颈活组织检测确诊为 CIN 的患者实施子宫锥形切除术或全子宫切除术发现,宫颈组织活检准确率为 60.7 %,活检诊断 CIN I 的准确率为 33.3 %,CIN II 的准确率为 36.6 %,CIN III 的准确率为 70.7 %,有研究指出^[30],联合阴道镜及宫颈活组织检测能够有效增加阳性诊断准确率,降低漏诊率。本文作者分析认为,单纯阴道镜检测对施术者经验及技术要求较高,对临床工作经历要较为苛刻,往往准确率较低,阴道镜下的活检技术则能够做到定位活检,增加宫颈病变阳性诊断率,同时阴道镜还能够通过拍摄图像来做到观察和跟踪病变过程的效果,因而诊断准确率较单一检测效果更佳。

总而言之,阴道镜及宫颈活组织检测对早期 CIN 具有较好的诊断效果,但联合检测诊断准确率更高,适用于早期 CIN 临床筛查中,值得进行临床推广应用。

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