Zhu et al., J Clin Case Rep 2018, 8:1
DOI: 10.4172/2165-7920.10001066

Journal of Clinical Case Reports

Case Report Open Access

The Diagnostic Process of Cervical Adenocarcinoma: Report of a Case

Laifang Zhu*, Junwei Zhao and Fang Li

Department of Gynecology, Tongji University, P.R China

Abstract

Background: Cervical adenocarcinoma has rarely been documented with literature reports focusing primarily on squamous cell carcinoma.

Case report: In this report, we present a case of a 66-year-old woman who presented with an abnormal Pap test with atypical squamous cells which cannot exclude high grade lesion (ASC-H). Pelvic MRI was performed and led to the diagnosis of stage IB1 endocervical adenocarcinoma. Subsequent radical hysterectomy, bilateral salpingo oophorectomy, bilateral pelvic lymph node cleaning operation and Lymph nodes by abdominal aorta dissection were performed. The definitive diagnosed was stage IIB1 well differentiated endocervical adenocarcinoma confirmed by histologic and immunohistochemical analysis. The patient received no adjuvant therapy and has remained without evidence of disease.

Conclusion: Cervical adenocarcinoma is easy to be missed and we should be vigilant.

Keywords: Cervical adenocarcinoma; Human papillomavirus; Case report

Introduction

As cervical adenocarcinoma was thought to be a rare occurrence, the cervical adenocarcinoma had not been emphasized in cervical cancer until rather recently. Because of the earliest precursor lesions of ADC occurring within the endocervical canal, the cytological and curettage samples obtained can be difficult to diagnose accurately and reproducibly. So cervical adenocarcinoma is easily missed diagnosis [1,2].

In this report, we present a case of a 66-year-old woman who was definitive diagnosed with stage IIB1 well differentiated endocervical denocarcinoma confirmed by histologic and immunohistochemical analysis.

Case Report

A 66-year-old Chinese woman presented with complaints of vaginal discharge quantity for more than a year and leucorrhea with blood for half a year. She had no other ocular complaint. She has menopause period of 18 years and twice childbearing histories. She has no history of other diseases and tumor family history.

Gynecological examination revealed small amount of yellow purulent secretion without peculiar smell in the vagina and an adhesion between her posterior lip of cervix and anterior lip, almost closed the opening of the cervix. Then palpate the cervical slightly bulky. Papanicolaou smear cytology report suggests atypical squamous cells, cannot exclude high bulky grade lesion (ASC-H). Human papilloma virus (HPV) DNA genotyping of high risk type test report HPV18 positive, negative low risk type.

Transvaginal sonography showed a medium echo with a clear margin in the cervical canal. The echo measured 29 mm × 28 mm × 32 mm (Figure 1). During the colposcopy examination, we saw an adhesive band between the posterior cervix lip and anterior lip and there is a minimum neoplasm on both ends of the adhesive band. When we got a biopsy on the adhesive band, great organization poured out from the opening of the cervix (Figure 2). Cervical biopsy and endocervical curettage (ECC) showed well-differentiated adenocarcinoma of the cervix. On immunostaining, the tumor cells from the cervix were diffusely positive for CK7 and p16, focally positive for Ki – 67 and P53, and negative for ER, PR and CD 10.

Pelvic magnetic resonance imaging (MRI) scan indicated that

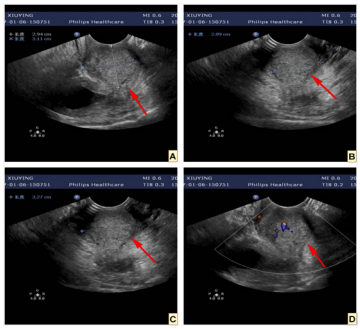

Figure 1: Transvaginal sonography: Transvaginal sonography showed a medium echo with a clear margin in the cervical canal. The echo measured 29 mm × 28 mm × 32mm.The echo measured 29 mm × 28 mm × 32mm.

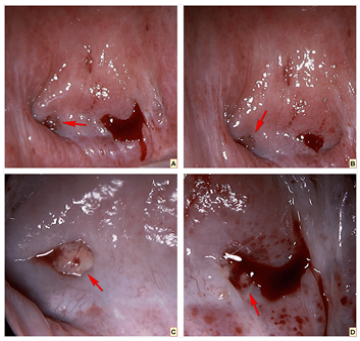

Figure 2: Colposcopy showed that there is an adhesive band between the posterior cervix lip and anterior lip, and on both ends of the adhesive band there is a minimum neoplasm.

***Corresponding author:** Laifang Zhu, Department of Gynecology, Tongji University, P.R China, Tel: +86-21-65982200; E-mail: 18001606986@163.com

Received December 11, 2017; **Accepted** January 20, 2018; **Published** January 27, 2018

Citation: Zhu L, Zhao J, Li F (2018) The Diagnostic Process of Cervical Adenocarcinoma: Report of a Case. J Clin Case Rep 8: 1066. doi: 10.4172/2165-7920.10001066

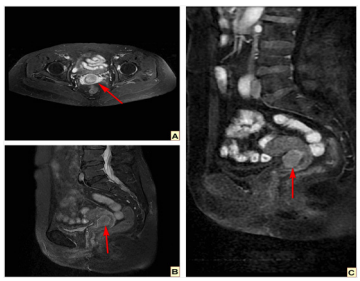

Figure 3: Pelvic MRI Scan revealed that uterine cervical anterior lip volume increase, about 26 mm × 16.1 mm × 16.1 mm, with a clear margin.

uterine cervical anterior lip volume increase, about 26 mm × 16.1 mm × 16.1 mm, with a clear margin. MRI imaging studies revealed no evidence of infringement of the cervical peripheral structure. T2-weighted pelvic magnetic resonance imaging showed the cervical lesion without parametrical invasion, lymphadenopathy or metastasis. (Figure 3). It was diagnosed with International Federation of Gynecology and Obstetrics (FIGO) stage IB1 cervical cancer. Subsequent radical hysterectomy, bilateral salpingo oophorectomy, bilateral pelvic lymph node cleaning operation and Lymph nodes by abdominal aorta dissection were performed. The definitive diagnosed was stage IIB1 well differentiated endocervical adenocarcinoma confirmed by histologic and immunohistochemical analysis. The patient received no adjuvant therapy and has remained without evidence of disease.

Discussion

Cervical cancer is the third most common cancer and the fourth leading cause of cancer death in women worldwide [3-5]. Invasive carcinomas of the cervix are classified into subtypes based on their histological features. Cervical squamous cell carcinoma (SCC) comprises approximately 75% to 80% of all cervical carcinomas and is the most common histological feature, followed by cervical adenocarcinoma (AC) and adenosquamous carcinoma (ASC) with together comprising approximately 15% to 20% of all cervical carcinomas [2,6,7]. The number of new cases of cervical cancer has been declining steadily over the past decade primarily due to improved Pap smear screening programs. However, this important trend does not extend to all histologic subtypes of cervical cancer. The rate of squamous cell carcinoma has declined steadily with the advent of Pap testing, but the incidence of cervical ADC is rising and year-on-year [8]. By using the latest available data, we estimated that ADC comprises almost a tenth of ICC globally and that the global burden of ADC is significant with reaching almost 60,000 new cases in 2015 [9] Several factors have been suggested to explain this trend, including the difficulty in diagnosing glandular lesions via Pap smear and other etiologic factors such as nulliparity, obesity and changes in oral contraceptive use [10].

The natural history of cervical ADC is very different from that of SCC and this may explain the lower rates of detection of premalignancies during cytologic screening. The earliest precursor lesions of ADC are more difficult to define than those of SCC and invasive ADC is thought to develop particularly from a small focus of adenocarcinoma *in situ* (AIS) [11]. AIS is more difficult to sample than squamous precancer as it typically occurs within the endocervical canal and the cytological and curettage samples obtained can be difficult to diagnose accurately and reproducibly [4]. The post-menopausal female patients usually have atrophy and adhesion of the cervix, the transformation zone is even more difficult observed by colposcopy and there are increased difficulties for the diagnosis and treatment of cervical ADC. As a result of these factors, ADC is often diagnosed at a more advanced disease stage than SCC and is generally associated with a worse prognosis [11].

It is known to all that more than 90% of cervical cancer cases are attributed to high risk human papillomavirus (HR-HPV) infection cervical cancer [12,13] ADC and ASC were strongly related to HPV16, 18 and 45 [14]. This finding was consistent across most of the countries. Nearly all AIS were associated with HPV16 or 18 infections [11].

Conclusion

In our case, the post-menopausal female patient presented with no obvious symptoms. Cytological analysis and the HR-HPV test are the 2 main methods for cervical cancer screening. In the patients with postmenopausal years, accompanied by cervical HPV18 infection and cervical adhesion, focal areas are easier to ignore. Therefore, clinicians should pay enough attention to cytology and HPV screening results, combining with colposcopy examination, try to avoid missed diagnosis.

References

1. Castanon A, Landy R, Sasieni PD (2016) Is cervical screening preventing adenocarcinoma and adenosquamous carcinoma of the cervix? Int J Cancer 139: 1040-1045.
2. Takiguchi E, Nishimura M, Mineda A, Kawakita T, Abe A, et al. (2017) Growth inhibitory effect of the Src inhibitor dasatinib in combination with anticancer agents on uterine cervical adenocarcinoma cells. Exp Ther Med 14: 4293-4299.
3. Bosch FX, Broker TR, Forman D, Moscicki AB, Gillison ML, et al. (2013) Comprehensive control of human papillomavirus infections and related diseases. 31: I1-31.
4. Xu XX, Zhou JS, Yuan SH, Yu H, Lou HM (2015) Distribution of HPV genotype in invasive cervical carcinoma and cervical intraepithelial neoplasia in Zhejiang Province, Southeast China: Establishing the baseline for surveillance. Int J Environ Res Public Health 12: 10794-10805.
5. Huchko MJ, Kahn JG, Smith JS, Hiatt RA, Cohen CR, et al. (2017) Study protocol for a cluster-randomized trial to compare human papillomavirus based cervical cancer screening in community-health campaigns versus health facilities in western Kenya. BMC Cancer 17: 826.
6. Wu SG, Sun JY, He ZY, Chen QH, Zhou J (2017) Early-stage node negative cervical adenocarcinoma and squamous cell carcinoma show similar survival outcomes after hysterectomy: a population-based study. J Gynecol Oncol 28: e81.
7. Wheeler CM, Hunt WC, Cuzick J, Langsfeld E, Robertson M, et al. (2014) New Mexico HPVPRSC: The influence of type-specific human papillomavirus infections on the detection of cervical precancer and cancer: A population-based study of opportunistic cervical screening in the United States. Int J Cancer 135: 624-634.
8. Ruiz R, Serrano M, Ruiz EF, Mantilla R, Valdivieso N, et al. (2017) Clinical-pathological features and survival in young women with cervical cancer: A retrospective analysis from the instituto nacional de enfermedades neoplasicas. Rev Peru Med Exp Salud Publica 34: 218-227.
9. Chiang YC, Chen YY, Hsieh SF, Chiang CJ, You SL, et al. (2017) Taiwan cervical cancer prevention surveillance C: Screening frequency and histologic type influence the efficacy of cervical cancer screening: A nationwide cohort study. Taiwan J Obstet Gynecol 56: 442-448.
10. Molijn A, Jenkins D, Chen W, Zhang X, Pirog E, et al. (2016) The complex relationship between human papillomavirus and cervical adenocarcinoma. Int J Cancer 138: 409-416.
11. Holl K, Nowakowski AM, Powell N, McCluggage WG, Pirog EC, et al. (2015) Human papillomavirus prevalence and type-distribution in cervical glandular neoplasias: Results from a European multinational epidemiological study. Int J Cancer 137: 2858-2868.
12. Colon-Lopez V, Ortiz AP, Del Toro-Mejias L, Clatts MC, Palefsky JM (2014) Epidemiology of anal HPV infection in high-risk men attending a sexually transmitted infection clinic in Puerto Rico. PLoS One 9: e83209.
13. Zhang L, Bi Q, Deng H, Xu J, Chen J, et al. (2017) Human papillomavirus infections among women with cervical lesions and cervical cancer in Eastern China: Genotype-specific prevalence and attribution. BMC Infect Dis 17: 107.

14. Chen W, Molijn A, Enqi W, Zhang X, Jenkins D, et al. (2016) The variable clinicopathological categories and role of human papillomavirus in cervical adenocarcinoma: A hospital based nation-wide multi-center retrospective study across China. Int J Cancer 139: 2687-2697.