

Case Report

Adenoid Basal Carcinoma: A First Case Report and Literature Review from the Mainland of P.R. China

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Received: 07-13-2014

Accepted: 07-30-2014s

Published: 08-04-2014

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Introduction

Adenoid basal carcinoma is a rare neoplasm of the uterine cervix, which mostly occurred among postmenopausal women [1]. Firstly, Baggish and Woodruff described it in 1966 [2]. It accounts for less than 1% of all cervical adenocarcinomas. Up to now, there have been fewer than 100 reported cases of this disease [3]. However, maybe due to the linguistic problem, these data did not take cases from the mainland of P.R. China into consideration. Owing the largest population of the world (more than 1.3 billion), we believe it is worthy to study the epidemiologic and clinicopathologic features of adenoid basal carcinoma from China. Herein, we report a case of adenoid basal carcinoma in our hospital. Simultaneously, literatures for all other reports of this rare carcinoma in China are reviewed.

Keywords: Cervical Carcinoma; Adenoid Basal Carcinoma; Literature Review; Immunohistochemical Marker

Case Report

The patient is a 67-year-old woman presented with one-year history of cervical neoplasm (<1cm), and two-month history of abnormal vaginal discharge. A physical examination revealed no abnormalities. In February 2012, a laser removal of cervical neoplasm was performed. The pathologic results were cervical adenoid basal carcinoma with both squamoid and adenoid differentiation (Figure 1A and 1B). Therefore, a hysterectomy and bilateral salpingo-oophorectomy was performed. The second pathologic findings were the same. Further, immunohistochemical stainings for Ki67 (indicating the proliferation status), P63 (specific for the adenoid components) and CK8 (specific for the basal-like components) were performed. The Ki67 index was about 60-70% or so (Figure 1C and 1D). A stain for p63 showed strong, diffuse nuclear staining of the tumor cells (Figure 1E and 1F), whereas stains for CK8 were mainly localized in the cells surrounding the adenoid structure (Figure 1G and 1H).

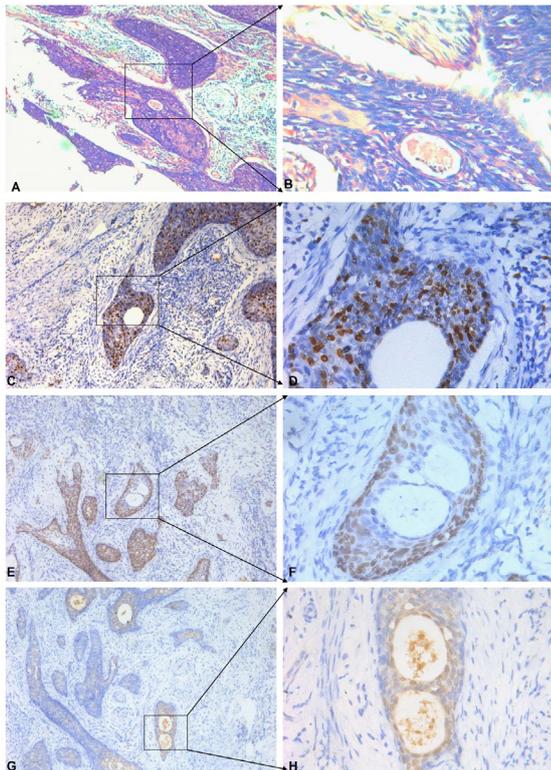
Discussion

We searched all the Chinese publications databases (Chinese National Knowledge Infrastructure, CNKI; Chongqing Vip database, VIP; China Biology Medicine, CBM) to review all adenoid basal carcinoma cases from our country. In total, there were four pieces of case reports about adenoid basal carcinoma, including 5 patients [4-6]. All the clinicopathologic characteristics were listed in Table 1. In recent years, several young patients were reported (the youngest was 20-year-old when diagnosed) [7,8]. In our review, two young women were diagnosed to be adenoid basal carcinoma at 31 and 42-year-old separately. According to Cviko's theory, the four specific compositions of adenoid basal carcinoma are: a classic HSIL; a limited invasive component with squamoid maturation, often with a discrete layer of peripheral basal cells; an outgrowth of small basal cells from either HSIL (high grade squamous intraepithelial lesion) or squamoid areas; and focal endocervical (adenoid) differentiation [9]. In the present

Table 1. Clinico-pathologic features of the adenoid basal carcinoma patients.

authors	case	age	ethnicity"	presentation	pelvic examination findings	associated cervical lesions	therapy(time)	follow-up (time)
Qiu	1	67	Han	abnormal vaginal discharge	cervical neoplasm (<1cm); cervical erosion	no	hysterectomy and bilateral salpingoo-oophorectomy(Feb,2012)	no recurrence(4 months)
Jing Ji	2	31	Han	no	cervical neoplasm (<0.5cm)	CIN III	hysterectomy(March, 2007)	no recurrence(2.5 years)
Mingli Huang	3	56	Han	no	cervical erosion(HPV16+)	CIN III	hysterectomy and bilateral salpingoo-oophorectomy(June,2006)	no recurrence(6 years)
Yunna Qin	4	51	Han	no	no	CIN III	hysterectomy(2008)	no recurrence(1 year)
Yunna Qin	5	55	Han	no	no	CIN III	hysterectomy(2008)	no recurrence(1 year)

present review, CIN III was detected in four of our five cases, which was also the main reason they came to see a doctor.



To date, many immunohistochemical markers had been detected in this disease, such as CK14, CK17, CK19, EMA, Laminin, CD117, P16, P53, Bcl-2 and so on, however, few had been proved distinctive for diagnosis [1]. In Qin's report, CK17, CK19, P63, Bcl-2 was all positively stained in two cases. Expression of P53 was thoroughly lost in Huang's case. Our case also showed strongly stained of P63, which was consistent with these previous descriptions.

Molecular studies showed that high-risk human papilloma virus (HPV) infection might be a promotion for the incidence of adenoid basal carcinoma. All five cases in John's study showed the presence of HPV 16 [10]. In Cviko's study, the HPV 16 positive rate is 80% (4/5) [9]. In our study, one case also showed HPV 16 infection.

Up to now, the mainly treatment for adenoid basal carcinoma is surgery, including loop electrosurgical procedure (LEEP), hysterectomy ± bilateral salpingoo-

oophorectomy. According to these reports, patients usually had an excellent outcome, no matter which kind of operation was performed. In 56 cases with pure adenoid basal carcinoma, none experienced recurrence, metastases or tumor-related death, with a follow-up ranging from 1 to 13 years [1]. Consistently, our data also indicates the favorable prognosis.

In summary, we reviewed all the adenoid basal carcinoma cases which were previously reported just in Chinese journals. As the population of China is much larger than any other countries, it is of adequated reasons to review this disease. We believe this work will help to better understand the etiology, pathology and treatment of this disease.

Conflict of Interest

None.

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