

Villoglandular adenocarcinoma of the cervix: a case report and review of histopathological features.

Adénocarcinome villoglandulaire du col utérin : à propos d'un cas et revue de la littérature

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ABSTRACT

We report the case of a 42-year-old woman with metrorrhagia. The physical examination revealed an exophytic, friable mass with endocervical development. It affirmed the diagnosis of villoglandular adenocarcinoma of the cervix.

Keywords: cancer, cervix uteri, pathology, villoglandular adenocarcinoma

RESUME :

Nous rapportons le cas d'une femme de 42 ans qui présentait des métrorragies. L'examen anatomopathologique pratiqué sur pièce d'hystérectomie totale révélait une masse exophytique, friable à développement endocervical. Il affirmait le diagnostic d'un adénocarcinome villoglandulaire du col utérin.

Mots clés : adénocarcinome villoglandulaire, anatomopathologie, cancer, col utérin

INTRODUCTION

Villoglandular adenocarcinoma is a rare subtype of endocervical adenocarcinoma. It was described for the first time by Young and Scully in 1989. It is a variant of well-differentiated endocervical adenocarcinoma [1]. It represents 4% of all subtypes [2]. It mostly affects childbearing women. In this work we discuss its morphological aspect and its differential diagnoses.

OBSERVATION :

We report a case of a 42-year-old woman with metrorrhagia. Clinical examination showed, a friable exophytic mass developing in the endocervical canal. Pap smear result was Glandular Cell Atypia favor neoplasm according to the Bethesda 2014 classification. A total hysterectomy without preservation of the adnexa was performed. On histological examination, we observed an infiltrating epithelial proliferation of papillary architecture with small conjunctivo-vascular axes. The papilla lining was made of pluristratified columnar cells with moderate cytonuclear atypia. The mitoses were quite numerous (5 by 10 HPF).

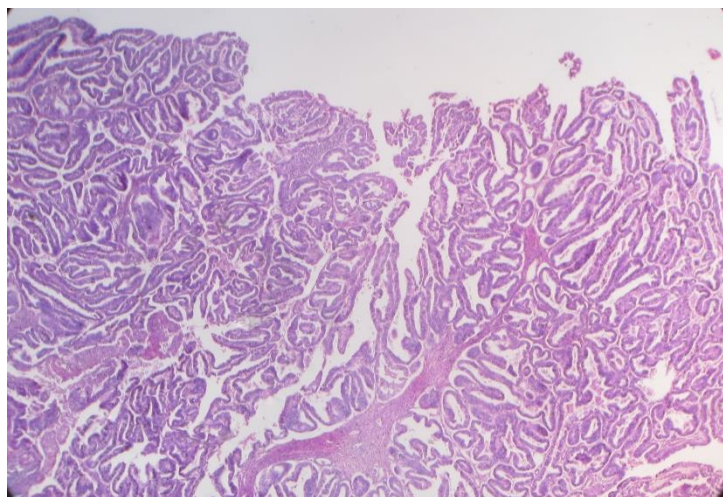


Figure 1: Total hysterectomy specimen. Villoglandular adenocarcinoma of the cervix. Papillary structures with slender connective axes. HE x 100. Source: Sampan'Asa Loterana momba ny FAhasalamana Andohalo Anatomical and Cytologic Pathology Laboratory.

DISCUSSION

Villoglandular adenocarcinoma of the cervix was recognized as an entity by the World Health Organization in 1994 [2]. It is a rare subtype that accounts for about 3-6% of adenocarcinomas [3, 4]. It represents 2.43% of cervical adenocarcinoma from 2012 to 2016 in the laboratory of SALFA. This is a particular form of mucinous adenocarcinoma of the endocervical type. On histological examination, the diagnosis is based on the presence of exophytic cell proliferation made of long and thin papillary structures with glove fingers features and discrete to moderate cellular atypia. Each papilla has a central pedicle that can be short and thick or long and thin. This central pedicle contains a variable number of inflammatory cells. The villoglandular structures are lined by multistratified glandular cells, with discrete to moderate cyto-nuclear atypia with mitotic figures. The tumor cells are of endocervical, endometrioid or intestinal morphology. Epithelial projections can be found from the villoglandular structures. The papillae are lined by cylindrical cells with closed apical pole [5], [6]. At the base of the tumor an invasive component may be present. It is generally composed of anastomosing glands separated by a fibrous stroma. The tumor is usually well circumscribed with only small foci of invasion [7], [8]. This histological

description was observed in our case. The differentiation was endocervical. We found foci of invasion.

The differential diagnosis of villoglandular adenocarcinoma are benign lesions of the cervix such as papillary endocervicitis, where the architecture is papillary but the lining is unistratified and made of regular or dystrophic cells. It can also be confused with malignant tumors such as adenosarcoma, minimally deviation adenocarcinoma and serous papillary carcinoma of the cervix. Adenosarcoma is a biphasic malignant tumor: mesenchymal and glandular. In minimally deviation adenocarcinoma, the cells are very well differentiated, cellular atypias are discrete and the tumor infiltrates the myometrium. Serous papillary carcinoma of the cervix has a complex papillary architecture lined with ovoid cells with marked atypia. Mitotic activity is more important [9].

From the etiological point of view, Jones et al reported that HPV 16 and 18 were significantly associated with villoglandular adenocarcinoma [10]. Our case could not benefit HPV research by molecular biology.

The treatment of choice combines conization with pelvic lymph node dissection [11].

CONCLUSION

The diagnosis of villo-glandular adenocarcinoma is anatomopathological and is based on precise architectural and morphological criteria. The diagnosis is more easily made on total hysterectomy because it allows a wide sampling of the lesion.

REFERENCES

- [1] Young RH, Scully RE. Villoglandular papillary adenocarcinoma of the uterine cervix. A clinicopathologic analysis of 13 cases. *Cancer*. 1989; 63:1773-9.
- [2] M. Wells, A.G. Ostor, C.P. Crum, et al. Tumors of the cervix. F.A. Tavassoli, P. Devilee (Eds.), *Tumors of the Breast and Female Genital Organs*, IARC Press, Lyon, France (2003), pp. 262-276
- [3] Wang SS, Sherman ME, Silverberg SG, Carreon JD, Lacey JV Jr, Zaino R, Kurman RJ, Hildesheim A: Pathological characteristics of cervical adenocarcinoma in a multi-center US-based study. *GynecolOncol* 2006, (103):541–6.
- [4] Yamazawa K, Matsui H, Seki K, et al. Human papillomavirus-positive well differentiated villoglandular adenocarcinoma of the uterine cervix: a case report and review of the literature. *GynecolOncol*. 2000; 77: 473-7
- [5] Lataifeh I M, Al-Hussaini M, Uzan C, ImadJaradat I, Duvillard P, Morice P. Villoglandular papillary adenocarcinoma of the cervix: a series of 28 cases including two with lymph node metastasis. *Int J Gynecol Cancer*. 2013;23 (5) 900-5.

- [6] Zhou Q Y, Chen H Y, Yang S M, Li Y H, Wu X Q. Villoglandular papillary adenocarcinoma of the uterine cervix: A report of 4 cases and a review of the literature. *Oncol Lett.* 2016; 11 (1): 837-41.
- [7] Macdonald RD, Kirwan J, Hayat K, Herrington CS, Shawki H. Villoglandular adenocarcinoma of the cervix: clarity is needed on the histological definition for this difficult diagnosis. *GynecolOncol.* 2006;100(1):192-4.
- [8] Costa MJ, McInay KR, Trelford J. Cervical carcinoma with glandular differentiation: histological evaluation predicts disease recurrence in clinical stage I or II patients. *Hum Pathol.* 1995;26(8):829-837.
- [9] Young R H, Clement P B. Endocervical adenocarcinoma and its variants: their morphology and differential diagnosis. *Histopathology.* 2002, 41, 185-207
- [10] Jones MW, Kounelis S, Papadaki H, et al. Well-differentiated villoglandular adenocarcinoma of the uterine cervix: oncogene/tumor suppressor gene alterations and human papillomavirus genotyping. *Int J Gynecol Pathol.* 2000;19 (2):110-107.
- [11] Maneo A, Chiari S, Bonazzi C, Mangioni C. Neoadjuvant chemotherapy and conservative surgery for stage IB1 cervical cancer. *Gynecol Oncol.* 2008;111(3):438-443.