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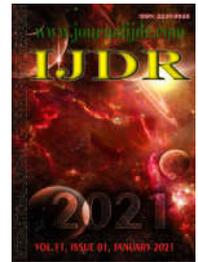
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RESEARCH ARTICLE

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GASTRIC-TYPE ADENOCARCINOMA OF THE CERVIX: A HETEROLOGOUS PATHWAY IN ONCOLOGY

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ABSTRACT

Malignant neoplasm of the cervix is a type of cancer strongly associated with infection by the human papilloma virus. However, there are uncommon histological subtypes that are not associated with this type of viral infection and may behave more aggressively. This article reported the case of a 48-year-old female patient, with a previous history of previous hysterectomy for an ovarian cyst, diagnosed with neoplasia of the uterine cervix histologically classified as well-differentiated gastric mucinous adenocarcinoma. There was no response to the initial treatment, with the patient having an unfavorable outcome.

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INTRODUCTION

Cervical cancer is the fourth most common cancer in the female population worldwide (Bray, *et al*, 2018). In Brazil, in 2020, the forecast is that it corresponds to 7.4% of the diagnoses of primary neoplasms in women, with the exception of non-melanoma skin cancer (INCA, 2019). The most common histological types are squamous cell carcinoma and adenocarcinoma (WHO, 2014), with a strong association of the neoplasia with infection by the oncogenic types of Human Papilloma Virus (HPV) (Walboomers *et al*, 1999). There is a subdivision among adenocarcinomas, between those associated and not associated with HPV, with gastric mucinous adenocarcinoma (GAS) being one of the subtypes not related to the virus (Karmamurzin, *et al*, 2015). This article reported the case of a patient, 48 years old, with a previous history of previous hysterectomy for an ovarian cyst, diagnosed with cervical neoplasia histologically classified as gastric mucinous adenocarcinoma, with aggressive behavior and unfavorable outcome.

Case Report

Female, 48 years old, evangelical, comes to a public oncology referral hospital, reporting that, in September 2019, she started to present macroscopic hematuria and moderate pain in the pelvic region. He has a previous history of hysterectomy in 2015 due to an ovarian cyst. She was admitted to the emergency department for clinical investigation. On physical examination, on vaginal touch, the vagina was uninjured, but with a bulging anterior wall, a retracted, immobile and bleeding cervix. Rectal examination with the presence of bulging of the anterior wall of the rectum. Compromised parameters. On tomography of the total abdomen, a mass of approximately 8.5 x 5.9 cm was observed in a rectal bladder space with compromised parametries, rectum, bladder and the presence of significant hydronephrosis. Cystoscopy was performed, which showed an elevation of the bladder floor, probably due to an infiltrating lesion of perineal origin. A biopsy of the cervix was performed, which proved to be a well differentiated gastric type adenocarcinoma.

Immunohistochemistry confirmed invasive gastric mucinous carcinoma, well differentiated with positivity for MUC6 and CEA, with negativity for estrogen receptor, protein p16, and for HPV cocktail subtypes 1,6,11,16,18 and 31. Chemotherapy treatment was started with the Carboplatin and Paclitaxel regimen, before the immunohistochemistry result. After that, due to non-response, it was decided to start the xelox regimen (capecitabine and oxaliplatin), however, the patient did not respond, evolving with an unfavorable outcome.

DISCUSSION

The main histological subtypes of cervical neoplasia are squamous cell carcinoma, which corresponds to approximately 90% of cases, and adenocarcinoma, which represents the remaining ten percent (WHO, 2014). The relationship between cervical neoplasia and infection with oncogenic HPV strains (mainly, subtypes 16 and 18) are well established (Bosch, *et al*, 1995). Viral infection is a necessary cause for the onset of neoplasia in virtually 100% of cases in squamous cell carcinoma, the most frequent histological type. (Walboomers, *et al*, 1999). In cervical tumors with histological classification of adenocarcinoma, subclassification should be used according to the one proposed by the World Health Organization (Kurman, *et al*, 2014). The usual subtype is the most prevalent and is also related to HPV infection. However, in approximately 10% of adenocarcinomas there is no viral infection together (Karamurzin, *et al*, 2015). Gastric adenocarcinoma is within the subdivision of mucinous carcinomas (Kurman, *et al*, 2014).

Another classification was proposed among cervical adenocarcinomas based on the presence or absence of a relationship with HPV and histological characteristics, with gastric type adenocarcinoma being classified as not associated with HPV (Karamurzin, *et al*, 2015). The tumor characteristic involves immunohistochemistry of gastric differentiation with expression of MUC6 and HIK1083 (Kojima, *et al*, 2007). The expression of p16 is usually negative (Park, *et al*, 2018). The non-positivity of HPV, the moderate atypia of the cells and the great similarity to that of the endocervical glands can make the diagnosis of such tumor a challenge (Lu, *et al*, 2019).

The invasive form of cervical cancer invades the vagina, parametrium, bladder, rectum, and can also cause ureteral compression and hydronephrosis (Sellors, Sankaranarayanan, 2002). Distant metastases are more frequent for the lungs, liver and bone. (Sellors, Sankaranarayanan, 2002). The diagnosis of GAS with invasion of Organs aforementioned organs is not uncommon, as the patient in this report. The use of Carboplatin and Paclitaxel as a palliative therapeutic regimen in advanced cervical tumors has been reported to be well tolerated, with relative toxicity, and in general a good regimen (Tinker, *et al*, 2005) (Garces, *et al*, 2013). However, with a very aggressive behavior, the five-year survival rate of the disease is between 38% to 42% (Kojima, *et al*, 2007) (Karamurzin, *et al*, 2015). It is important that the diagnosis of this neoplasia is made in the early stages, making suspicion and medical follow-up as early as possible essential (Lu, *et al*, 2019).

REFERENCES

- Bosch FX, Manos MM, Muñoz N, Sherman M, Jansen AM, Peto J, Schiffman MH, Moreno V, Kurman R, Shah KV. Prevalence of human papillomavirus in cervical cancer: a worldwide perspective. International biological study on cervical cancer (IBSCC) Study Group. *J Natl Cancer Inst*. 1995 Jun 7;87(11):796-802.
- Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 68(6):394-424.
- Garces AH, Mora PA, Alves FV, do Carmo CC, Grazziotin R, Fernandes AC, Nogueira-Rodrigues A, de Melo AC. First-line paclitaxel and carboplatin in persistent/recurrent or advanced cervical cancer: a retrospective analysis of patients treated at Brazilian National Cancer Institute. *Int J Gynecol Cancer*. 2013
- Instituto Nacional de Câncer José Alencar Gomes da Silva. Estimativa 2020 : incidência de câncer no Brasil / Instituto Nacional de Câncer José Alencar Gomes da Silva. – Rio de Janeiro : INCA, 2019. 120p.
- Karamurzin YS, Kiyokawa T, Parkash V, Jotwani AR, Patel P, Pike MC, Soslow RA, Park KJ. Gastric-type Endocervical Adenocarcinoma: An Aggressive Tumor With Unusual Metastatic Patterns and Poor Prognosis. *Am J Surg Pathol*. 2015 Nov;39(11):1449-57
- Kojima A, Mikami Y, Sudo T, Yamaguchi S, Kusanagi Y, Ito M, Nishimura R. Gastric morphology and immunophenotype predict poor outcome in mucinous adenocarcinoma of the uterine cervix. *Am J Surg Pathol*. 2007 May;31(5):664-72.
- Kurman RJ, Carcangiu ML, Herrington CS and Young RH (2014). WHO classification of tumours of the female reproductive organs. IARC press, Lyon
- Lu S, Shen D, Zhao Y, Kang N, Wang X. Primary endocervical gastric-type adenocarcinoma: a clinicopathologic and immunohistochemical analysis of 23 cases. *Diagn Pathol*. 2019 Jul 6;14(1):72. doi: 10.1097/IGC.0b013e31828c141d. Erratum in: *Int J Gynecol Cancer*. 2013 Jun;23(5):978
- Park CM, Koh HM, Park S, Kang HS, Shim SS, Kim SY. Gastric type mucinous endocervical adenocarcinoma of the uterine cervix: very rare and interesting case. *Obstet Gynecol Sci*. 2018 Jan;61(1):165-169
- Sellors JW, Sankaranarayanan R. Colposcopy and treatment of cervical intraepithelial neoplasia: a beginners' manual. Lyon, France, IARCPress, 2002
- Tinker AV, Bhagat K, Swenerton KD, Hoskins PJ. Carboplatin and paclitaxel for advanced and recurrent cervical carcinoma: the British Columbia Cancer Agency experience. *Gynecol Oncol*. 2005 Jul;98(1):54-8.
- Walboomers JMM, Jacobs MV, Manos MM, Bosch FX, Kummer JA, Shah KV, *et al*. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. *J Pathol* 1999;189:12-9.
- World Health Organization. (2014). Comprehensive cervical cancer control: a guide to essential practice, 2nd ed. World Health Organization