Comedo-like skin metastases in cervical carcinoma

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Abstract
Cervical cancer (CC) is one of the most common cancers of the female reproductive system. In advanced stages, it might lead to metastases via hematogenous or lymphatic spread. Patients with hematogenous metastases are less common with a higher risk of death. This article focuses on a case of CC with comedo-like spinocellular skin metastases. These structures, typical for basaloid squamous cell carcinoma, represent an uncommon and extremely rare finding even in advanced CC and are associated with a poor prognosis.

INTRODUCTION
The incidence of cervical cancer (CC) cutaneous metastases is estimated to be around 1.3% (Imachi et al. 1993). Many morphologic findings, including nodules, plaques, or inflammatory telangiectasias, have been described. (Alrefaie et al. 2019; Basu & Mukherjee, 2013; Benoulaid et al. 2016; Derouane & Honhon, 2020; Imachi et al. 1993; Katiyar et al. 2013; Shimizu et al. 1983) Comedo-like openings, typically seen in seborrheic keratosis or melanoma, were observed in our case. (Minagawa, 2017)

CASE DESCRIPTION
A 65-year-old female was admitted with profuse vaginal bleeding lasting for two weeks, lower abdominal pain, cachexia, and dyspnoea. We found non-specific nodules on both lower extremities, the groin, and abdominal areas (Figure 1). She did not report any personal or family history of skin malignancy. Since we had not received any epidemic history, first of all, we tried to rule out an infectious cause of the lesions. They were similar to nodules typical for tuberculosis, lupus vulgaris, or sarcoidosis. Chest X-ray findings were negative. We found a completely tumour-thickened anterior vaginal wall. Vaginal stenosis and nodules of the clitoris were also present. A biopsy of the nodules was performed, and histopathological examination confirmed comedo-like advanced spinocellular CC with foci of central necrosis (Figure 2). Immunohistochemistry revealed HPV (p16) positivity and the presence of Ki67 proliferative activity in 50% of tumour cells (Figure 3). The patient started to develop dysphagia, and mineral disbalance worsened with severe hypercalcemia. Unfortunately, she died 5 days later.

DISCUSSION
CC is diagnosed in 600,000 females and is responsible for approximately 300,000 deaths worldwide annually. It is the sixth most common cancer and the second most common one among young women.
women. The typical hematogenous metastases of any tumour can be found in the liver, lungs, and bones. The incidence of cutaneous metastases from solid tumours is 0.7-9%. (Imachi et al. 1993) In women, the most common primary tumours metastasizing to the skin are related to the breast, colon, lung, and ovarian cancer. (Handa et al. 2017) Skin metastases from CC are rare, even in the advanced stages. The incidence does not exceed 2%. (Imachi et al. 1993) To our knowledge, only a few cases have been reported worldwide.

The abdominal wall and vulva are the most common sites for CC skin metastases, followed by the anterior chest wall, lower extremities, and scalp. (Imachi et al. 1993, Handa et al. 2017) In our case, they were mainly localized in the clitoris, lower extremities, and abdominal areas. The mechanism behind this type of metastasis is still unknown. One possible cause could be attributed to the retrograde spread of the tumour secondary to lymphatic obstruction. In a few reports, skin metastases were found to appear after oncological treatment. (Chen et al. 2014) Prognosis in patients at IV B stage of CC is very poor and five-year survival is 5.3-20%. The mean survival time is 16 months. (Jayant et al. 2016, Usami et al. 2016) This case was staged as an advanced stage of CC and is consistent with the above-mentioned findings.

Comedo-like openings, seen in the histopathological examination, correspond to epidermal invaginations filled with keratin. The nuclei may be quite pleomorphic with high mitotic counts. Geographical comedo-like necrosis and pleomorphic nuclei are frequent co-variables. These structures are commonly found in basaloid squamous cell carcinoma or seborrheic keratosis, but their presence is not limited to this type of lesion and should be considered in the differential diagnosis. (Minagawa, 2017)

CONCLUSION

We have described a rare case of CC that manifested as comedo-like spinocellular skin metastases. This finding makes the diagnosis of CC challenging for both gynaecologists and dermatologists. We report this case to remind clinicians to consider the diagnosis of CC in the evaluation of patients with non-specific skin nodules.

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