39°CBU

HISTOLOGICAL TYPES OF PENILE SQUAMOUS CELL CARCINOMA AS A PREDICTOR OF INGUINAL LYMPH NODES METASTASIS

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Introdução e Objetivo

Penile Squamous Cell Carcinoma (PSCC) is a rare neoplasia with a high incidence in developing countries. The state of Maranhão, Northeast - Brazil, has the highest incidence of PC ever recorded. The histopathological parameters still remain the main tool for predicting inguinal lymph node metastasis (ILNM) in PC patients, such as the histological subtype. However, the global low incidence of PC makes a more reliable analysis of these subtypes difficult, especially for some rare variants. The high incidence of PC in Maranhão makes it a good model to study the disease and its histological features. Thus, this study aimed to analyze the prognostic profile of PSCC patients from Maranhão according to their histological subtype.

Método

We included 73 patients with penile cancer diagnosed at three referral hospitals located in São Luís, Maranhão, Brazil. The H&E slides of all PSCC cases were reviewed by two different pathologists for classification using the criteria proposed by the World Health Organization (WHO), 2022. We considered as metastatic PSCC only those patients who had histopathological analysis of the resected lymph nodes. Categorical variables were analyzed using contingency tests and only results with $p<0,05$ were considered significant.

Figuras

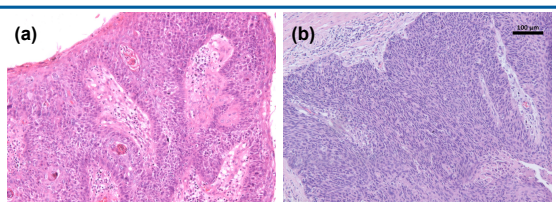

Figure 1 - Histological sections of penile cancer in HE representing **(a)** warty-basaloid and **(b)** basaloid types.

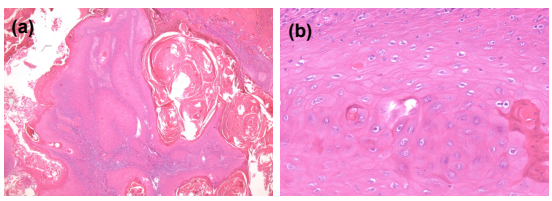

Figure 2 - Histological sections of penile cancer in HE representing **(a)** warty type with the **(b)** presence of koilocytes.

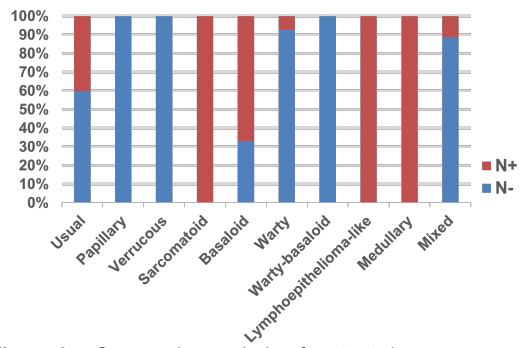

Figure 3 - Comparative analysis of metastasis rates among penile cancer histological types.

Resultados

After histological review, the majority (35/73) of the PSCC cases were classified as usual (47.9%). We observed one case of papillary PSCC (1.3%), 3 of verrucous (4.1%), 2 of sarcomatoid (2.7%), 3 of basaloid (4.1%), 14 of warty (19.1%), 4 of warty-basaloid (5.48%), 1 of lymphoepithelioma-like (1.3%), 1 of medullary (1.3%) and 9 of mixed (12.3%). Twenty-two patients (30.1%) were diagnosed with ILNM. We observed ILNM in all patients with sarcomatoid, lymphoepithelioma-like, and medullary subtypes, and only in 40% and 66.6% of the usual and basaloid cases, respectively. Among the metastatic cases, mixed and warty subtype PSCCs had the lowest rates of ILNM (11.1% and 7.14%). None of the patients with papillary, verrucous, and warty-basaloid subtypes had ILNM. After statistical analysis, papillary, verrucous, warty, warty-basaloid and mixed PSCC subtypes were associated with absence of ILNM ($p=0.011$).

Conclusão

Our results highlight an association between PSCC histological subtypes and the risk of ILNM and contribute to a better understanding of the prognostic profile of PSCC patients in Maranhão. Hence, this study is ongoing to provide a more comprehensive description of the clinical and molecular features of PSCC histological subtypes.

Referências

WANG, Jin-You et al. Histological subtype is a significant predictor for inguinal lymph node metastasis in patients with penile squamous cell carcinoma. **Asian Journal of Andrology**, v. 20, n. 3, p. 265, 2018.

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