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CASE REPORT

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LATE CUTANEOUS MANIFESTATION OF HERPES ZOSTER AFTER OCCURRENCE OF PELVIC PAIN AND TENESMUS IN METASTATIC BLADDER CANCER, A CASE REPORT

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Abstract

Herpes zoster (HZ) results from reactivation of a latent varicella zoster virus (VZV) infection. Clinical manifestations are more common and possibly severe in immunodepressed patients, such as cancer patients. Indeed, HZ can even lead to life-threatening complications. We report the case of an atypical presentation of HZ in an advanced urothelial cancer patient, presenting with long prodromal symptoms and late vesicular eruption. Given the atypical presentation of HZ reactivation among some immunocompromised patients, this case emphasizes the need of clinical suspicion for HZ as differential diagnosis. Furthermore, clinician awareness of prevention of HZ with the recombinant zoster vaccine (RZV) in immunodepressed individuals is also critical to minimize the risk of disease activation and associated morbidity in such patients.

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Introduction:-

Herpes zoster (HZ) is the infectious reactivation of varicella-zoster virus (VZV). HZ is more frequent in patients with a compromised immune system, such as patients with cancer [1]. HZ cutaneous and visceral dissemination can lead to serious and disabling consequences, particularly in patients whose immune system is depressed by systemic diseases or by immuno-suppressive treatments [2].

Other established risk factors for HZ reactivation are age and systemic and prolonged glucocorticoid exposure [3].
To prevent the risk of HZ in immunocompromised patients, including cancer patients, the latest guidelines recommend administering the recombinant zoster vaccine (RZV), especially in patients about to start chemotherapy regimens causing severe lymphopenia/neutropenia that are linked to a higher risk of VZV reactivations. On the other hand, there is no conclusive data on the efficacy of RZV during immunotherapy and/or target-therapy, and in these cases recommendations for vaccination against HZ should be based on patient general conditions, life expectancy and age [4].

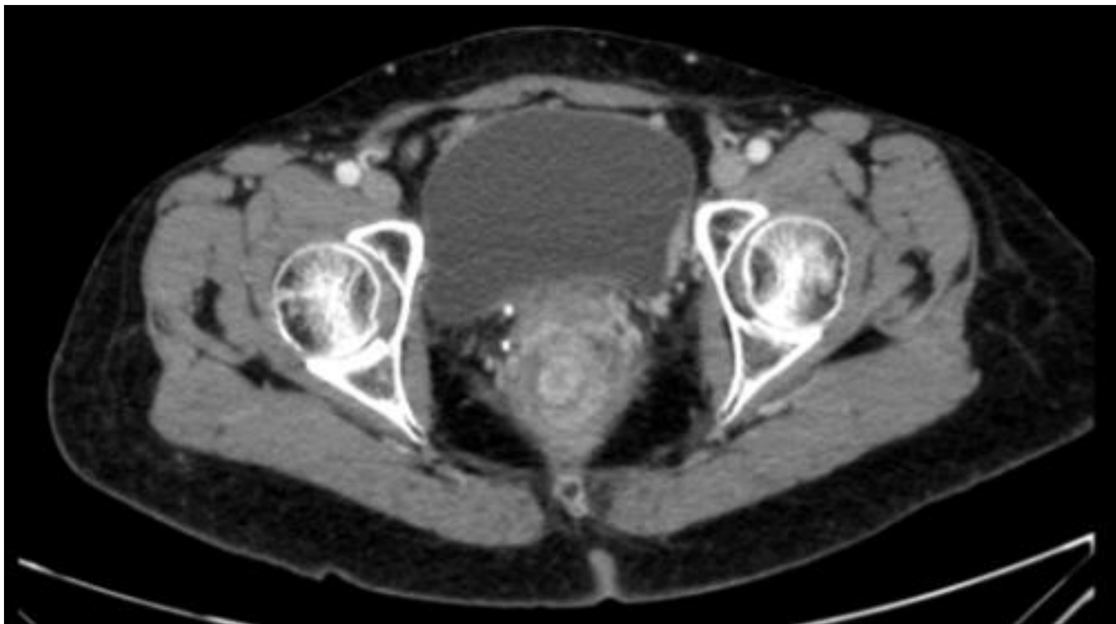
HZ manifests with a prodromal phase consisting of uncharacteristic mild flu-like symptoms for 2–5 days. Common initial typical symptoms are burning pain and/or sensory disturbances in the area of the adjoining dermatomes, followed by the development of skin rash with the peculiar grouped papules evolving to vesicles [5].

Our clinical case describes a middle-aged woman affected by advanced urothelial carcinoma who has developed long unconventional symptoms of HZ, while on chemo-immunotherapy. Those symptoms have resulted into a difficult and late diagnosis, also because of the concomitant symptomatic primary bladder tumor.

Case presentation

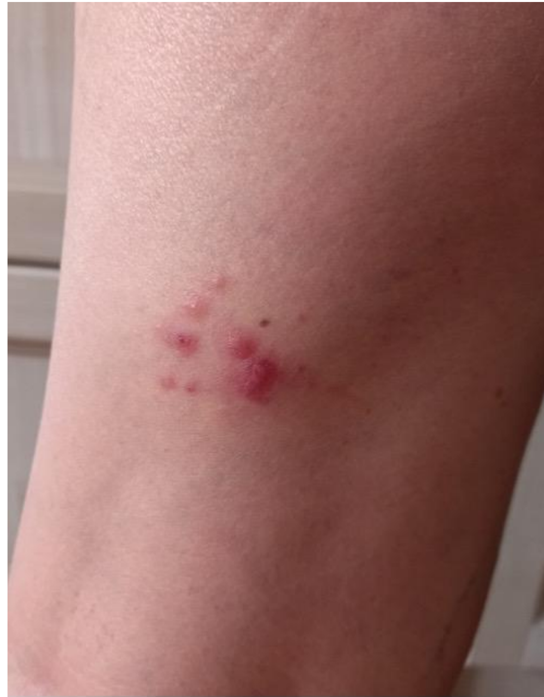
A 66-year-old woman with locally advanced and metastatic peritoneal urothelial bladder cancer, presented with worsening pelvic pain and tenesmus. Given the local disease involving the rectum - thus resulting in frequent hospital admissions for bowel occlusions - a prophylactic colostomy was performed before starting the patient on systemic treatment – namely combination of chemotherapy and immunotherapy. Systemic treatment was well tolerated, without reporting any major clinically significant adverse event. The restaging CT scans performed while on therapy were in keeping with disease partial response according to RECIST 1.1 criteria.

Because of worsening perineal pain, the patient was started on painkillers. A CT scan was taken but that did not show any progressive disease (PANEL A). A proctological examination was also performed, but it was unremarkable.



Panel A:- CT scan performed after pain worsening, showing pelvic disease response.

Few weeks later, the pain started to irradiate to the left leg and eventually a red blistery skin rash broke out on the left posterior thigh (PANEL B) – along the sciatic nerve distribution. A dermatological examination confirmed the diagnosis of herpes zoster virus eruption on resolving phase. Topical pserocin was prescribed as well as systemic painkillers with subsequent clinical improvement until resolution. No late persistent symptoms were reported.



Panel B:- Blistery red skin rash on the left posterior thigh.

Discussion:-

Rare cases of herpetiform cutaneous metastases from transitional cell carcinoma of the urinary bladder are described, so it is important to put them on a differential diagnosis with the manifestations of HZ [6]. In our case, the patient showed a disease response in all the metastatic lesions, documented on the CT scan, so the hypothesis of herpetiform cutaneous metastases was quite unlikely. Moreover, the unilateral distribution of the lesions overlapping with the sciatic nerve radiation were features more typical of HZ.

In the above-describedcase, the final diagnosis was however difficult because the cutaneous manifestation of HZ was far delayed from the pain onset. Additionally, the patient was affected by locally advanced bladder cancer, and the presence of pelvic pain would have been more suspectedof tumor progression.

In frail patients, such as those with cancer, early diagnosis of HZ, or even better prevention with vaccination, is recommended because it allows etiologic therapy to be started as soon as possible with a better overall outcome. Indeed, immunocompromised patients could even present disseminated zoster, consisting of multiple skin lesions in a generalized distribution distant from the main dermatome affected [7].

Conclusion:-

HZ reactivation in frail patients undergoing systemic treatment for cancer is a frequent phenomenon and therefore it should be definitely considered in the differential diagnosis particularly of unilateral, aching pain with dermatomal distribution. Skin manifestations can help to correctly diagnose the infection, however, there are cases that are atypical and therefore more difficult to recognize. In these cases a specialist evaluation is necessary.
Many tumor types and cancer treatments have been studied as possible risk factors for HZ. Therefore, vaccination with RZV should be considered/highly recommendedin cancer patients to avoid serious complications while on therapy or cancer-treatment delays. [1, 8].

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