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A Rare Case Report of Pure Squamous Cell Carcinoma of Urinary Bladder

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Abstract
Bladder carcinoma accounts for approx. 7% of all cancers and the most common histological variant is transitional cell carcinoma. Other rare variants are squamous cell carcinoma (adenocarcinoma, small cell carcinoma, and sarcomas. Pure squamous cell carcinoma of bladder is very rare and needs detailed histopathological examination to differentiate it from transitional cell carcinoma with squamous differentiation. We are presenting a case of 55year old male with past history of chronic cystitis and vesical calculus, who developed pure squamous cell carcinoma of urinary bladder after 2 years.
Keyword: *Bladder carcinoma, squamous cell carcinoma, urinary bladder.*

Introduction

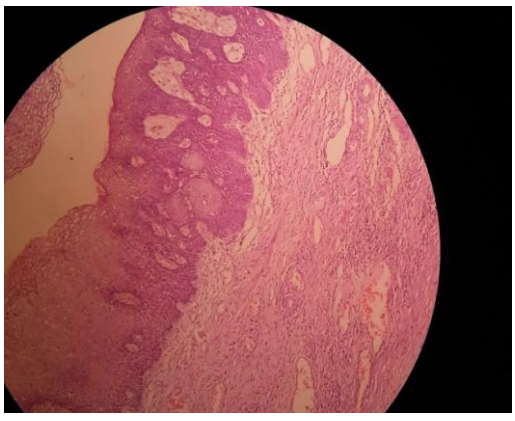
Bladder carcinoma accounts for approximately 7% of all cancers and the most common histological variant is transitional cell carcinoma[1]. Other rare variants are squamous cell carcinoma (adenocarcinoma, small cell carcinoma, and sarcomas). Pure squamous cell carcinoma of bladder is very rare and needs detailed histopathological examination to differentiate it from transitional cell carcinoma with squamous differenation. We are presenting a case of pure squamous cell carcinoma of urinary bladder, with past history of chronic cystitis with vesical calculus.

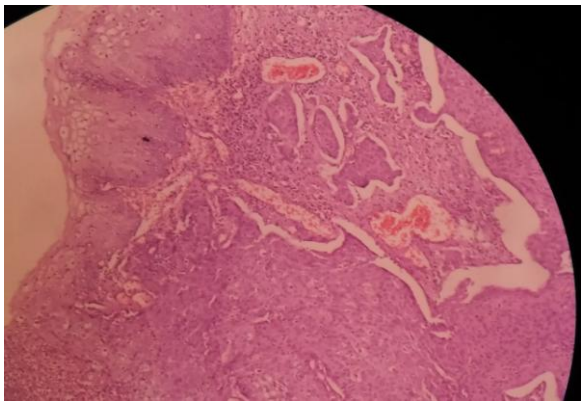
Case report

This is a case report of a 55 years old male presenting with complaints of increased frequency of micturition since 3 weeks. Patient also complained of occasional hematuria and dysuria since last 2 weeks. During primary evaluation, he was evaluated with ultrasound, cystoscopy followed by Computed tomography (CT) abdomen and pelvis which showed 6.1x6x4 cm mass filling the bladder, localised to anterior wall and dome. CT scan did not show any significant adenopathy or lesion anywhere else. Following this patient was taken up for Trans urethral biopsy of bladder tumour. Histopathology report showed

moderately differentiated pure squamous cell carcinoma, with muscle invasion. After consent patient was taken up for surgery. He underwent radical cystectomy with ileal conduit and bilateral pelvic lymph node dissection. Grossly the cystectomy specimen measured 13x10x9 cms. Cut surface showed ulceroproliferative growth present in the dome and anterior wall of bladder measuring 10x6.5x4cms.Tumour was infiltrating the muscular layer, invading into the perivesical fat. Cut surface of tumour appear solid, grey white and friable (Figure 1).

On histopathological examination the bladder growth revealed pure squamous cell carcinoma without transitional cell component. The tumour was infiltrating the underlying muscular layer into the perivesical pad of fat. Adjacent bladder mucosa showed squamous metaplasia (Figure 2).





Post operatively recovery was uneventful and the patient is currently on follow up and doing well.

Discussion

Carcinoma bladder accounts for 7% of overall malignancy[1]. Various histological types are transitional cell carcinoma (90%), squamous cell carcinoma(5%), adenocarcinoma (2%), small cell carcinoma and sarcomas[2]. Pure squamous cell carcinoma is a relatively rare entity; most are mixed with components of transitional malignancy.

Clinical presentation are usually common for all histological types. Squamous cell carcinoma occurs in a background of chronic cystitis[3]. Various reason for chronic cystitis are congenital anomalies like exostrophy, chronic infection, lithiasis, chronic indwelling catherization and parasitic infection[4]. Chronic cystitis leads to marked squamous metaplasia, which slowly undergoes dysplasia and develops into invasive malignancy. This case also had past history of surgery for vesicular calculus causing chronic cystitis which could be the predisposing factor for development of pure squamous cell carcinoma.

Squamous cell carcinoma grossly appears as large, ulcerated and necrotic mass. They may occur at multiple sites in bladder, mostly over trigone area. Most of them have exophytic pattern of growth as seen in our case[5].

Muscle invasive urothelial malignancy are treated with neoadjuvant chemotherapy followed by surgery or definitive chemoradiation therapy. Whereas squamous cell carcinoma does not respond much to chemotherapy. Hence, surgery is a mainstay of treatment. Also Squamous cell

carcinoma has poorer prognosis as compared to urothelial malignancies. Hence it is important to identify this rare entity and differentiate it from TCC with squamous differentiation. At times when there is difficulty in differenting these tumors IHC can play role in diagnosing these entities.SCC shows positivity to high molecular weight keratin and p63. Urothelial component shows positivity to uroplakin, uromodulin, GATA 3, CK7, CK20[6].

Conclusion

Pure squamous cell carcinoma is a rare histological subtype of bladder carcinoma that arises frequently in a background of chronic irritation. Identifying this entity is important as it is associated with poor response to chemotherapy and has poor prognosis.

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