

Adenocarcinoma of Rectosigmoid Junction metastatic to Testis

S.U. Rahman, M. Ali (Shaukat Khanum Cancer Hospital and Research Center, Lahore.)
S. Mansoor, T. Mahmood (Departments of Radiation Oncology and Pathology, Lahore.)

Introduction

This report presents a patient with testicular metastasis from rectosigmoid junction. Although rectal tumors metastasize to numerous sites especially liver, lungs, bones, adrenals, brain etc¹, but metastatic carcinoma to the testis is rare. The most common primary sites include prostate, lung, kidney, stomach, malignant melanoma etc.²⁻⁵ Sometimes carcinoids and neuroblastomas can also metastasize to testis. As far as our information acquired from literature search, this is the first report of testicular metastases from rectal carcinoma.

Case Report

A 50 year old gentleman presented to our surgical outpatient department with two years history of bleeding per rectum with off and on lower abdominal pain. He was pale, lethargic and emaciated. On digital rectal examination, hard fungating cauliflower like growth was found at anorectal junction. Systemic examination revealed no significant findings. Laboratory investigations showed Hb 10gm/dl. LFT's blood urea, creatinine and glucose level were all within normal limits. CEA level was 19ng/ml. Chest x-ray showed apical fibrosis and calcification consistent with old T.B. Colonoscopy/flexible sigmoidoscopy revealed fungating mass obliterating lumen approximately 15 cm from anal verge. CT abdomen / pelvis showed rectal mass with probable early extension beyond the wall with single right pelvic lymph node. Biopsy revealed well differentiated adeno carcinoma. He underwent lower anterior resection and histopathology revealed adeno carcinoma with negative margins. Post op CEA level was 6 ng/ml. He was offered adjuvant pelvic radiotherapy 50Gy/5 weeks with concomitant 5-Fluorouracil @ 500 mg/m², first and last three days of radiotherapy, followed by further 5 courses of 5-Fluorouracil. However, chemotherapy was withheld after 3 cycles because of poor tolerance while concurrent therapy for pulmonary tuberculosis was continued. He was on regular follow-up in surgical clinic and medical oncology, when serial rise in CEA level was noted. Meanwhile he developed right testicular swelling. There were no gastrointestinal tract related symptoms. Sonogram showed right hydrocele. On examination hard irregular epididymis swelling was felt. Provisional diagnosis of epididymo-orchitis was made. It was planned to get right testicular biopsy to rule out genital tuberculosis. Biopsy revealed metastatic adenocarcinoma (invasive mucinous adenocarcinoma, identical with previous histology).

Discussion

Metastatic carcinoma to the testicle is rare and is usually associated with diffuse systemic disease.² Bilateral testicular involvement is noted in 15% of the cases. Among the gastrointestinal tract primaries, gastric carcinoma with secondaries in testis, and spermatic cord have been reported.^{3,4} Among urothelial tumors, renal cell carcinoma and prostatic adenocarcinoma have been found metastasizing to testis.⁵ The diagnosis of renal cell carcinoma with testicular metastasis should be considered in evaluating a clear cell carcinoma variants, particularly in an older male if appearance suggests sertoli cell tumor.⁵⁻⁷ Metastasis of prostatic adenocarcinoma to testis is usually detected after bilateral orchidectomy for hormonal management of metastatic prostate carcinoma.^{7,8} Other primary sites with reported testicular metastasis include carcinoid (origin from small intestine), non-small cell lung cancer and neuroblastoma.^{9,11} Concerning this case report, after extensive literature search, we concluded that, so far, this is the first report of rectosigmoid primary with testicular metastasis.

References

1. Niederhurber JE. Colon and rectum cancer. Patterns of spread and implications of work-up. *Cancer* 1993; 71:4187.
2. Thrasher J, Frazier H. Non-germ cell testicular tumors. *Prob Urol* 1994; 8:167.
3. Wai HP, Yau IK. Metastatic tumor of testis from carcinoma of the stomach. *Int. J Clin Pract* 2000;54:685-6.
4. Ota I, Koiko R. Spermatic cord metastasis from gastric cancer with elevation of serum B-HCG; a case report. *Jpn J. Clin Oncol* 2000; 30:239-40.
5. Datta MW, Ulbright TM. Renal cell carcinoma metastatic to the testis and its adnexa. *Int. J Surg Pathol* 2001; 949-56.
6. Steiner G, Heimbohn D. Simultaneous contralateral testicular metastasis from a renal clear cell carcinoma. *Scand J Urol Nephrol* 1999;33:1367.
7. Baykal K, Yildirim S. Metastasis of prostate adenocarcinoma to testis. *Int. J Urol* 1997;1:104-5.
8. Han M, Kronz JD. Testicular metastases of transitional cell carcinoma of the prostate. *J Urol* 2000; 6: 2026.
9. Danikas D, Sachs R. Testicular metastases from ileal carcinoid. *Dis Colon Rectum* 2001 ;44: 1365-6.
10. Wang WS, Chior TJ. Non small cell lung cancer with testicular metastases. *Zhonghua Yi Xue Za Zhi (Taipei)* 1996,58:54-7.
11. Simon T, Hero B. Testicular and paratesticular involvement by metastatic neuroblastoma. *Cancer* 2000;88:2636-4 I.