

**CASE REPORT**

# Carcinoma Prostate with Unusual Site and Unusual Mode of Metastasis

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**Abstract**

Metastasis from prostate cancer to sigmoid colon without direct extension is rarest of rare finding. Patients of ca prostate presenting with lower gastro-intestinal symptoms needs complete evaluation to rule out metastasis to colorectal region from prostatic adenocarcinoma. As the primary management of primary colorectal carcinoma is surgery, whereas in case of metastatic lesion from ca prostate requires hormonal and /or chemotherapy. Therefore, distinction is essential to tailor proper treatment. As many as 20% of patients of ca prostate are diagnosed to have distant metastases at the time of presentation. We are reporting a patient of ca prostate who presented with metastatic polyps in sigmoid colon without any intra-abdominal disease.

**Key Words**

Prostate adenocarcinoma, Sigmoid colon, ployp, Colonoscopy

**Introduction**

Metastasis from prostate cancer to sigmoid colon without direct extension is rarest of rare finding. Patients of ca prostate presenting with lower gastro-intestinal symptoms needs complete evaluation to rule out metastasis to colorectal region from prostatic adenocarcinoma. As the primary management of primary colorectal carcinoma is surgery, whereas in case of metastatic lesion from ca prostate requires hormonal and /or chemotherapy. Therefore, distinction is essential to tailor proper treatment. As many as 20% of patients of ca prostate are diagnosed to have distant metastases at the time of presentation. [1] We are reporting a patient of ca prostate who presented with metastatic polyps in sigmoid colon without any intra-abdominal disease.

**Case Report**

64 years male, known case of hypertension and diabetes on treatment reported with lower urinary tract symptoms. General physical examination was unremarkable. Digital rectal examination revealed hard nodular and enlarged prostate. Contrast enhanced magnetic Resonance Imaging (CEMRI) of pelvis demonstrated T1-T2 hyperintense image measuring 8x7 cm lesion in peripheral zone. Doubtful extracapsular extension in to left seminal vesicle was also noted. Transrectal ultrasonography

(TRUS) revealed grade two enlarged prostate with central zone showing features of Benign hyperplasia prostate (BHP). Peripheral zone was heterogeneous with micronodularity and stranding without any definite discrete solid mass. TRUS guided biopsy showed features of Adenocarcinoma -Not otherwise specified (NOS) with a Gleason Score of 9 (4+5) and grade 3. 8/8 cores were positive for the disease. 60% of prostatic biopsy was involved by the tumor with absence of lymphovascular invasion (LVI) and Perineural invasion (PNI) was reported to be positive. Serum PSA was 10.26ng/ml. Bone scan showed increased tracer uptake in upper end of left femur. Patient underwent bilateral orchidectomy. Patient received EBRT 20 Gy (5#) to the femur. In the meanwhile, patient had one episode of bleeding per rectum. Patient was subjected to colonoscopy. Small pedunculated polyps were seen in sigmoid colon. Histopathological examination (HPE) of polyps showed features of Poorly differentiated adenocarcinoma. Immunohistochemistry (IHC) was positive for CK7, PSA, NKX 3.1 and negative for calretinin, PAX 8, CD56. Clinical impression of metastatic adenocarcinoma to sigmoid colon from prostate was made.

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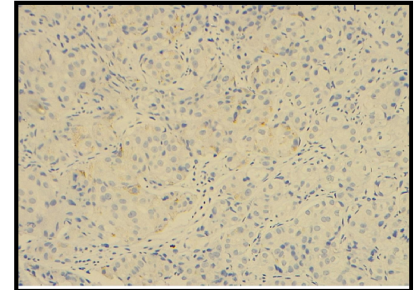
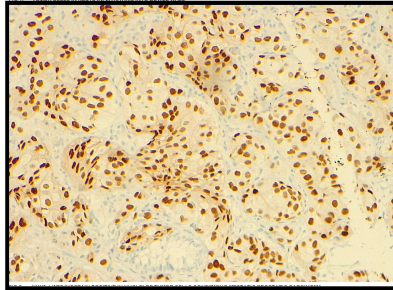
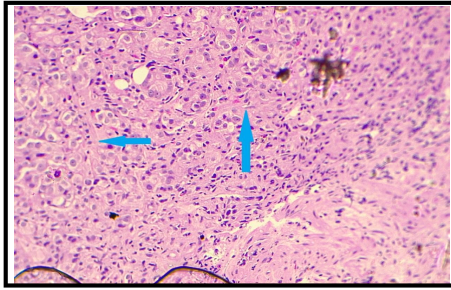
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**Fig 1. Tumor Cells in Nests Infiltrating into Bowel Wall Fig.2 Immunostain Positive in Nuclei of Tumor Cells Confirming Metastatic Prostatic Carcinoma Fig 3. Immunostain Showing Diffuse Positivity in Tumor Cells of Prostatic Carcinoma**

**Discussion**

Prostatic cancer progression occurs either by direct invasion, lymphatic or hematogenous spread. Overall, 20% of patients present with metastatic disease. [1] The most commonly organs involved by direct extension include base of urinary bladder, seminal vesicle and lymphatic spread to pelvic lymph nodes and hematogenous spread to Skelton. [2] Rectal involvement is known to occur by direct infiltration through Denon Villiers fascia or the prostatic cancer can spread to rectal or peri-rectal tissue via needle biopsy tract. [3] Prostatic cancer metastasis to rectosigmoid region is known to occur by subserosal implantation of malignant cells which is rare phenomenon. [4] Distant metastasis to bowel is extremely rare with a prevalence of 1-4% on autopsy series. [5] In our case there were small pedunculated polyps in proximal sigmoid colon which is considered to be metastatic rather than spread by infiltration or spread via needle biopsy. Abbas et al reported similar case of rectal metastasis from carcinoma prostate in their case report. [6] Our case is different because sigmoid colon is distant from prostate and was detected to have a small intraluminal pedunculated polyps without any intra-abdominal disease on imaging except ca prostate. Mohammad et al reported a case of ca prostate with metastases to caecum [7], where intra-abdominal spread from prostate is possible. Hiren Patel and his colleagues reported a man of 71 years of age with ca prostate with synchronous metastatic polyps in stomach and sigmoid colon. [8] However their diagnosis of metastasis was purely on the basis of histopathological examination (HPE) without IHC. We in our case documented metastatic sigmoid ployp by HPE as well as IHC. Lopez *et al* evaluated a case of rectosigmoid polyp in a patient of ca prostate, who was diagnosed to have metastatic lesion by HPE and IHC from prostate. [9] However, a pelvic mass was found in their case on imaging. Our case is different, as there was no intra-abdominal disease. In addition to routine histopathological examination, IHC distinguishes

primary colorectal cancer from metastatic disease from other primaries. [10] In our case IHC was positive for PSA and NKX 3.1 staining and hence diagnosis of metastatic disease was confirmed.

**Conclusion**

Metastases from prostate cancer to lower gastrointestinal tract without direct extension is extremely rare. In case of ca prostate, a patient presenting with bleeding per rectum is to be evaluated for metastasis from prostate apart from ruling out primary adenocarcinoma, as it will help to tailor proper treatment which otherwise will be mislead as primary carcinoma of colorectal origin.

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Nil.

**Conflicts of Interest**

There are no conflicts of interest.

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