Secondary Seminal Vesicles Tumor: A Case Report

Wadah Ceifo¹, Sameh Abed El Aziz Ahmed², Naorem Gopendro Singh³
¹Urology Department, Al-Jahra Hospital, Kuwait
²Department of Radiology, Al-Jahra Hospital, Kuwait
³Department of Histopathology, Al-Jahra Hospital, Kuwait

Case Report

Secondary seminal vesicle tumors are rarely malignant. Tumor metastasis from colonic cancer arising in this location is even rarer and has only been described in case reports. Due to the rarity of such tumors, the appropriate optimal treatment remains unclear. We report this case of secondary tumor in the seminal vesicle.

INTRODUCTION

Tumors of the seminal vesicle are extremely rare. Among them, there is a spectrum of primary tumors derived from both epithelium and stroma or secondary tumors arising from other organs[1]. Herein, we present a patient with a secondary malignant tumor in this unusual location.

CASE REPORT

An Asian single male patient, 34 years old, presented to surgical casualty complaining of recurrent abdominal pain, constipation and vomiting since two weeks. He had no chronic diseases. On clinical examination, the patient was febrile and the abdomen was mildly distended with palpable hard rectal mass, about 7 cm from anal verge on digital rectal examination. His laboratory investigations revealed mild leucocytosis, Hemoglobin 13.9 gm and normal renal and liver function tests. Multiple fluid levels were observed on erect abdomen X-ray. The patient was admitted to surgical ward as sub-acute intestinal obstruction, the patient passed motion and pain subsided. Abdomino-pelvic CT with oral, rectal and IV contrast showed dilated appendix with small phlebolith inside, circumferential mural wall thickening of terminal ileum and ileo-cecal junction associated with proximal dilatation of proximal ileal and distal jejunal bowel loops, mild free intra-peritoneal fluid collection and multiple scattered enlarged mesenteric lymph nodes, and soft tissue lesion was seen insinuating between and inseparable from right seminal vesicle and lateral rectal wall with suspected focal infiltration of right aspect of posterior urinary bladder wall (mostly neoplastic lesion, exophytic from right lateral rectal wall or originating from seminal vesicle) and normal filling of urinary bladder. PSA is 1.061 ng/ml. Colonoscopy was done and visualised caecal polypoidal mass and biopsy were taken but histopathological examination reported nonspecific inflammation. Then the patient underwent diagnostic laparoscopy (showed inflamed appendix, dilated small bowel, enlarged mesenteric lymph nodes and hard extraperitoneal mass between urinary bladder and rectum but failed to see any mass in the colon), and appendectomy. Lymph node biopsy and peritoneal fluid sampling were done. The histopathological examination reported lymph node metastatic adenocarcinoma of unknown origin and inflamed appendix. At the same time, diagnostic cystoscopy was done which showed right trigone pushed up from outside by irregular mass distorting both ureteric orifices with no visible invading mass. Right retrograde study revealed compression of right lower ureter by pelvic mass. Right DJS fixation and multiple Transrectal ultrasound (TRUS) guided biopsies from the pelvic mass performed

Address correspondence to:
Dr. Wadah Ceifo, Urology Unit, Department of Surgery, Al-Jahra Hospital, Kuwait. Telephone: 00965 97390065, Fax: 24569431
E-mail: wceifo@gmail.com
and detected a hypoechoic 2 × 1.7 cm tumor in the right seminal vesicle. The histopathological examination of these biopsies revealed portion of normal seminal vesicle tissue with an occasional highly atypical gland infiltrating the smooth muscle. The gland showed focal mucin secretion favoring metastatic colorectal adenocarcinoma. The patient had refused any surgical removal of semen vesicle and therefore, he was explored through a midline abdominal incision and a complex mass posterior to urinary bladder was identified. A palpable hard mass lesion was discovered on ascending colon and therefore, right hemicolectomy and ileo-mid transverse colon anastomosis were performed. Then he was sent to our Oncology Center for further management with chemotherapy and radiation. The final histopathological examination reported poorly differentiated adenocarcinoma of the colon (pT3pN2pMx) Stage IIIC, Duckes C. The patient’s postoperative recovery was uneventful. One year after surgery, a CT scan showed no signs of recurrence with stabilization in the size of the seminal vesicle tumor. He is currently alive and well.

DISCUSSION

We have reported here a rare case of a secondary tumor of the seminal vesicle. Usually, these malignant tumors have only minor complaints, such as nonspecific lower abdominal pain or urinary frequency. Diagnosis should be considered in the presence of a mass located superior to prostate and posterior to bladder, protruding the rectal wall. In cases of suspicious masses of the seminal vesicles, abdominal ultrasound first showed the existence of a pelvic mass with possible origin from the seminal vesicle, as confirmed by subsequent transrectal ultrasound (TRUS) due to excellent visualization of the seminal vesicles and adjacent structures. At the same time, it offers the opportunity of performing a TRUS-guided biopsy of the seminal vesicles for histological confirmation. Additional radiological evaluation with magnetic resonance imaging (MRI) and computed tomography (CT) are required to visualize the exact extent of metastases and concomitant pelvic pathology(Fig 1).

Differential diagnosis is made with expansive injuries of retrovesical space such as carcinomas and cystic tumors. Immunohistochemical analysis using prostate specific antigen and prostatic acid phosphatase may be done to exclude prostatic origin.

The aim of treatment of primary seminal vesicles is curative radical surgery prior to any infiltration of neighboring organs or even a metastatic disease. However, chemotherapy and radiotherapy seem to be effective as adjuvant treatment modalities. For secondary seminal vesicle tumor, there isn’t large experience on management of such neoplasm.
The diagnostic laparoscopy was inconclusive in establishing the diagnosis. Transrectal ultrasound guided biopsies of the seminal vesicle led us to do an exploratory laparotomy, in this case, it is logic to remove the whole tumor and involved seminal vesicle, but as our patient was still unmarried, had refused such management because of the possibility of erectile dysfunction and infertility. Due to the fact that histological findings of a poorly differentiated adenocarcinoma of the colon is an advanced disease with evidence of lymph node metastasis, we decided to perform systemic chemotherapy with local pelvic radiation\cite{7,8}. This management led to the stabilization of the disease.

**CONCLUSION**

Secondary seminal vesicle tumors are rare. To the best of our knowledge, we have presented a very rare case of a patient with poorly differentiated metastatic adenocarcinoma of the seminal vesicle diagnosed due to his presentation with Ileus. The prognosis of such cases with lymph node metastases is poor. In our case, chemotherapy with radiation led to stabilize the disease, which was followed up by active surveillance.

**REFERENCES**