

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 58366

Title: Prostatic carcinosarcoma 7 years after radical prostatectomy and hormonal therapy for prostatic adenocarcinoma: a case report

Reviewer's code: 05372790

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2021-01-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-01-17 05:54

Reviewer performed review: 2021-01-20 12:57

Review time: 3 Days and 7 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

SPECIFIC COMMENTS TO AUTHORS

These comments reflect the Criteria Checklist above: 1. Title is representative; 2. Abstract is reflective however more information is requested which will be discussed further later in this review; 3. Addition of keyword Sarcomatoid carcinoma may also be helpful; 4-14. Comments within the context of the paper is below: Introduction Adenocarcinoma of the prostate is a prevalent cancer in men worldwide, whereas prostatic carcinosarcoma is uncommon. It is extremely rare for a patient to have both neoplasms EXPLAIN WHY IT'S RARE – ADENOCA ELDERLY AND RARE UNDER 50 WHEREAS SARCOMA IS RARE 0.1% AND MORE PREVELENT IN YOUNGER AGE GROUP; THUS, COMBINED THE DIFFERENCE IN AGE GROUP OCCURANCE ALONG WITH RAREITY OF SARCOMA ITSELF MAKES THIS EXCEEDINGLY RARE FOR THESE 2 CONDITIONS TO CO-EXIST IN THE SAME INDIVIDUAL – THIS IS WHY IT'S RELEVANT AND IMPORTANT CASE STUDY TO REPORT[1]. When they do occur together as carcinosarcoma, half of the patients have a history of prostatic adenocarcinoma with radiation or androgen deprivation therapy (ADT) [2,3,10]. We experienced an unusually delayed occurrence of prostatic carcinosarcoma 7 years after radical prostatectomy and ADT for prostatic adenocarcinoma. Case presentation A 66-year-old male MORE DEMOGRAPHIC INFORMATION MAY BE RELEVANT – OCCUPATION, RACE, MARRITAL STATUS presented with recurrent symptoms of gross hematuria and urinary retention in voiding. His medical history was significant for prostatic adenocarcinoma (T2a stage, Gleason`s score 3+4; tPSA:16 ng/ml). ANY OTHER RELEVANT SYMPTOMS PRIOR TO PRESENTATION? WEIGHT LOSS, PAIN, OTHER HOSPITALIZATIONS? He had undergone an open radical prostatectomy 7 years ago. Because the patient`s PSA level was 0.4 ng/ml one month after the surgery, he underwent a one-year ADT with goserelin and flutamide. On physical examination,

the patient had a large fixed rectal mass. Prostate-specific antigen (PSA) was 1.857ng/ml. Computed tomography (CT) Imaging demonstrated an approximately 15cm*9cm*8cm big tumor mass with necrosis in the central part of the tumor distorting the bladder neck, which can only be recognized by a catheter balloon (Fig 1). MRI images showed a large tumor mass occupying the majority of the pelvic cavity with no evidence of rectal metastasis (Fig 2). Bone scan and chest X-ray were also negative for metastases. Transrectal biopsy demonstrated a poorly differentiated carcinosarcoma tumor. The patient underwent total pelvic exenteration with ureterostomy for urinary diversion. Pathology demonstrated the tumor tissue had an extensive hemorrhage and central necrosis, invading the whole bladder wall at one site. More nucleoli, mitotic figures, and adenoid structures of tumor cells were seen. Immunostaining confirmed the final pathology as prostatic carcinosarcoma with focal heterologous cartilage stained by vimentin-positive spindled cells and bizarre cells (Fig 3). Cytokeratin (partial positive), EMA (-), Vimentin (+), PSA (less than 30% positive), Desmin (-), CD117(-), S-100 (-), CD34 (-), BCL-2 (-). Nevertheless, the patient underwent transverse colostomy subsequently for carcinosarcoma recurrence and bowel obstruction 3 months later. 5 months after the diagnosis of prostatic sarcoma, the patient died of tumor multiple organ metastases

DESCRIBE AUTOPSY FINDINGS – TUMOR SIZES; HISTOLOGIC REVIEW OF POST MORTEM MATERIAL.

Discussion Prostatic carcinosarcoma is an exceedingly rare and aggressive malignancy that can develop many years after initial presentation with prostatic adenocarcinoma. The mean age at diagnosis was 66 years or more among all published cases [3,4,5]. McGee et al. found that among less than 100 patients, 58% had a previous diagnosis of prostatic adenocarcinoma. Most patients (61%) had previous treatments history of radiation, ADT, or combined. Only 3% of patients had a history of radical prostatectomy [3]. Many theories or hypotheses were developed based on the origin of prostate carcinosarcoma, especially the transformation of

adenocarcinoma into sarcoma [6,10]. Although a variety of hypotheses about the biphasic nature of these tumors were presented, carcinosarcomas seem to represent the best example in human cancers of the concept of epithelial-mesenchymal transition and dedifferentiation, in which the two parts of the tumor are genomically related to one another DOES THIS CASE CONFIRM THIS HYPOTHESIS - SHOW EVIDENCE; ALSO NEED TO EXAMINE THE EPITHELIAL COMPONENT TO CONFIRM WHAT IT IS COMPRISED OF AND WHAT DIFFERENTIATIONS ARE IN THE STROMAL COMPONENT [7]. Previous reports in the literature have raised the possibility that treatments especially radiation or hormonal therapy may induce the development of subsequent sarcomatoid carcinoma [5,10], but our patient had no history of radiation. There is the possibility that prostatectomy plus ADT therapy may also develop a sarcomatous component, whereas some investigators discount ADT because the multitude of patients treated with ADT did not develop these rare tumors [2,4]. Overall, the reason for the minority of patients with prostatic adenocarcinoma developing into carcinosarcoma in a long period is still uncertain. Patients with carcinosarcoma often have a normal or low serum PSA compared to those with adenocarcinoma. The malignant neoplasm may also contain multiple sarcomatoidentities [3,8]. The most commonly found was osteosarcoma (50%), followed by chondrosarcoma (33%), and leiomyosarcoma (17%). Cases of rhabdomyosarcoma, malignant fibrous histiocytoma, fibrosarcoma, spindle cell sarcoma, angiosarcoma, and undifferentiated sarcoma have also been reported [4,5,9]. As previously reported, prognosis with prostatic carcinosarcoma is extremely poor, with a 20% actuarial risk of death 1 year after the diagnosis. Radical surgery or pelvic exenteration seems to be the best treatment for patients with prostatic carcinosarcoma. Many patients developed subsequent metastatic disease and local bulky tumor burden [2,5,9]. Carcinosarcoma of the prostate is a very rare and highly aggressive tumor. Currently, radical surgery is the most viable option for

treatment. If the disease has spread beyond the prostatic tissue, most patients will not survive for more than 6 months. The prognosis is dismal regardless of histological or clinical findings. Abbreviations: ADT, androgen deprivation therapy; PSA, Prostate-specific antigen; CT, Computed tomography.

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 58366

Title: Prostatic carcinosarcoma 7 years after radical prostatectomy and hormonal therapy for prostatic adenocarcinoma: a case report

Reviewer's code: 02907574

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2021-01-10

Reviewer chosen by: Jia-Ping Yan

Reviewer accepted review: 2021-01-12 07:06

Reviewer performed review: 2021-01-23 03:05

Review time: 10 Days and 19 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Since prostatic carcinosarcoma is a rare disease, the number of published reports is small, and the mechanism of its occurrence has not been elucidated. This reviewer thinks that it is important to disclose information by accumulating many cases, but also feels that it is not always useful for readers because there is nothing novelty in this case compared to past ones. For example, this reviewers thought that additional investigation from the viewpoint of molecular biology (such as gene analysis) would be helpful for the readers. Minor points I would like to know the details of the pathological results at the time of radical prostatectomy. Especially related to the excision margin. It was a CAB for only one year, but I would like to know the reason and the PSA progress after that (whether it was below the measurement sensitivity). Because, at seven years after prostatectomy, PSA had risen to 1.857 even though there was no prostate tissue.

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 58366

Title: Prostatic carcinosarcoma 7 years after radical prostatectomy and hormonal therapy for prostatic adenocarcinoma: a case report

Reviewer's code: 02445433

Position: Editorial Board

Academic degree: PhD

Professional title: Professor, Research Assistant Professor, Senior Scientist

Reviewer's Country/Territory: Italy

Author's Country/Territory: China

Manuscript submission date: 2021-01-10

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-01-11 13:33

Reviewer performed review: 2021-01-24 13:27

Review time: 12 Days and 23 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors described a rare case of carcinosarcoma derived from prostate cancer in a patient. The case is well described and is interesting. However, minor revisions are required. The authors must reconsider the following items: The sentence “There is the possibility that prostatectomy plus ADT therapy may also develop a sarcomatous component, whereas some investigators discount ADT because the multitude of patients treated with ADT did not develop these rare tumors” must be discussed more in depth. For instance, could the authors relate the previous anatomic-pathological data of the patient to this type of progression? Moreover, are there in vitro evidence sustaining the hypothesis that ADT can promote the development of this kind of cancer progression? It would be relevant to know the patient’s familial history of prostate cancer and add it in the paper. The authors are invited to discuss the strengths and weaknesses of surgical interventions versus alternative palliative care. Typos in care checklist (carsinosarcoma).

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 58366

Title: Prostatic carcinosarcoma 7 years after radical prostatectomy and hormonal therapy for prostatic adenocarcinoma: a case report

Reviewer's code: 02907574

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2021-01-10

Reviewer chosen by: Han Zhang (Part-Time Editor)

Reviewer accepted review: 2021-03-04 12:47

Reviewer performed review: 2021-03-04 13:02

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
<https://www.wjgnet.com>

No further comments.