

## Editorial Comment

### Editorial Comment from Dr Sakamoto to Solitary recurrence of prostate cancer surrounded by seminal vesicle/vas deferens-like epithelium

Metastasis of prostate cancer predominantly takes place in bone and regional lymph nodes. However, metastases to uncommon regions are often regarded as a poor prognostic sign.<sup>1,2</sup>

Takamori *et al.* reported a very rare case of prostate cancer recurrence that seemed to be surrounded by seminal vesicle/vas deferens-like epithelium after radiation therapy.<sup>3</sup>

Based on the previous report, congenital cystic anomalies of the seminal vesicle may be classified in to three groups, such as (i) isolated cyst, (ii) cysts associated with upper urinary tract anomalies, and (iii) cysts associated with autosomal dominant polycystic kidney disease. During development, cysts of the seminal vesicle emerge when one is in their 20s and become sexually active. Seminal vesicle cysts are usually below 5 cm, which is often discovered by various symptoms, such as urinary tract infections, infertility, prostatitis, hematuria, and hemospermia.<sup>4,5</sup> Cyst of the seminal vesicle is often associated with ipsilateral renal agenesis in around 60% of the patients. The reason seems that the development of the seminal vesicle cyst associated with the defect in the development of the distal mesonephric duct and misdeveloped ureteral budding, which results in the renal agenesis.<sup>4,5</sup>

Regarding the ectopic prostate, although it is rare, there were several reports in the past. The most common site seems to be the bladder and urethra, followed by seminal vesicle, testis, and epididymis. Some reports also indicated the presence of ectopic prostate in the cervix and vagina in females.<sup>6</sup> The mechanism for the emergence of ectopic prostate has been related to the migration and misplacement of normal tissue, metaplastic change due to chronic inflammation, and retained embryonic tissue.

In the current case, neither renal agenesis nor any symptoms existed.

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So, the chance of existence of a seminal vesicle cyst before the emergence of recurrence seems to be low.

Another possibility may be related to the ectopic prostate that developed to be a malignant cancer with the seminal vesicle/vas deferens-like epithelium.

Due to limited previous evidence, we seem to have no clear answer. However, this case will bring about new insights into the metastatic feature of prostate cancer.

Since metastasis with seminal vesicle-like epithelium is rare, the long-term prognosis of this case may be of interest.

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## Conflict of interest

The author declares no conflict of interest.

## References

- 1 Yamada Y, Sakamoto S, Rii J *et al.* How many bone metastases may be defined as high-volume metastatic prostate cancer in Asians: a retrospective multicenter cohort study. *Prostate* 2020; **80**: 432–40.
- 2 Sakamoto S, Maimaiti M, Xu M *et al.* Higher serum testosterone levels associated with favorable prognosis in enzalutamide- and abiraterone-treated castration-resistant prostate cancer. *J. Clin. Med.* 2019; **8**: 489.
- 3 Takamori H, Kamba T, Sumiyoshi S *et al.* Solitary recurrence of prostate cancer surrounded by seminal vesicle/vas deferens-like epithelium. *IJU Case Rep.* 2020; **3**: 171–3.
- 4 Arora SS, Breiman RS, Webb EM, Westphalen AC, Yeh BM, Coakley FV. CT and MRI of congenital anomalies of the seminal vesicles. *Am. J. Roentgenol.* 2007; **189**: 130–5.
- 5 Gorrea M, Lorente R, Roel J. Seminal vesicle cyst associated with ipsilateral renal agenesis and papillary carcinoma of the bladder. *Eur. Radiol.* 2001; **11**: 2500–3.
- 6 Tan FQ, Xu X, Shen BH *et al.* An unusual case of retrovesical ectopic prostate tissue accompanied by primary prostate cancer. *World J. Surg. Oncol.* 2012; **10**: 186.


Takamori *et al.* witnessed an extremely rare case of solitary recurrence of prostate cancer (PCa) surrounded by an epithelium of seminal vesicle/vas deferens.<sup>1</sup> A 54-year-old male patient with PCa (initial prostate-specific antigen [PSA] level 140 ng/mL, Gleason score 4 + 5, cT3bN0M0) underwent neoadjuvant androgen deprivation therapy (ADT) for 6 months and intensity-modulated radiation therapy (IMRT)

with a total dose of 78 Gy. Six years after the IMRT, a solitary metastatic lesion in the left external iliac area had appeared. Laparoscopic metastasectomy was performed to remove it, because it enlarged with rapid increase of PSA despite of degarelix acetate administration. After the laparoscopic metastasectomy, his serum PSA level has remained successfully at nadir for 3 years without additional treatments. It speculated that the resected mass was an ectopic seminal vesicle metastasized by PCa. One question has been emerged here. Why did not the administration of degarelix acetate work to shrink the mass size nor decrease serum PSA level even though the tumor was positive for androgen receptor without a neuroendocrine differentiation? It is still unknown when and how the tumor acquired castration-resistance.

Case reports of ectopic seminal vesicle have seldom been reported. Azar *et al.* reported a 30-year-old male case with a retroperitoneal ectopic seminal vesicle located on above the sacrum.<sup>2</sup> It was communicated with left vas deferens and a duct-like structure arising from lower pole of right kidney. The duct was 7 cm in length and lined by urothelium.

Metastasis-directed therapy (MDT) has not been a standard of treatment for recurrent PCa; however, growing evidence suggests that MDT may be beneficial to manage patients with oligometastases.<sup>3,4</sup> Mosca *et al.* reported a case of curative lung metastasectomy without concomitant ADT in oligometastatic castration-resistant PCa. Histopathologic examination of the resected lung showed a neuroendocrine differentiation. Thirty-two months after the lobectomy, the patient was free from recurrence without ADT. Successful treatment of oligometastatic PCa depends on the development and spread of diagnostic imaging modalities that can accurately visualize metastatic sites. The Dutch urological representatives

suggested that perceived accuracy of imaging modalities for diagnosing oligometastatic PCa was higher for prostate-specific membrane antigen positron emission tomography/computed tomography (PET-CT) than choline PET-CT and whole-body magnetic resonance imaging.<sup>5</sup>

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## References

- 1 Takamori H, Kamba T, Sumiyoshi S *et al.* Solitary recurrence of prostate cancer surrounded by seminal vesicle/vas deferens-like epithelium. *IJU Case Rep.* 2020; **3**: 171–3.
- 2 Azar HA, Sommers SC. Retroperitoneal ectopic seminal vesicle communicating with a contralateral solitary kidney: report of a case. *J. Urol.* 1958; **79**: 994–8.
- 3 Battaglia A, De Meerleer G, Tosco L *et al.* Novel insights into the management of oligometastatic prostate cancer: a comprehensive review. *Eur. Urol. Oncol.* 2019; **2**: 174–88.
- 4 Mosca A, Mantica G, Giavarra M *et al.* Curative lung metastasectomy without concomitant androgen deprivation therapy in oligometastatic castration-resistant prostate cancer: a case report and review of the literature. *Clin. Genitourin. Cancer* 2019; <https://doi.org/10.1016/j.clgc.2019.11.018>.
- 5 Aluwini SS, Mehra N, Lolkema MP *et al.* Oligometastatic prostate cancer: results of a Dutch multidisciplinary consensus meeting. *Eur. Urol. Oncol.* 2020; **3**: 231–8.