

# Chiropractic Office Prostate Cancer Appearing as Hip Pain: A Case Report and Literature Review

**Eric Chun-Pu Chu**

Department of Chiropractic and Physiotherapy, New York Chiropractic and Physiotherapy Centre, Hong Kong, HKG

**Corresponding Author:**

Eric Chun-Pu Chu, Department of Chiropractic and Physiotherapy, New York Chiropractic and Physiotherapy Centre, Hong Kong, HKG

**Received Date :** Aug 04, 2023

**Accepted Date :** Aug 05, 2023

**Published Date :** Sep 05, 2023

## ABSTRACT

One of the most prevalent tumours in men is prostate cancer, which frequently metastasizes to the hip, spine, and pelvis and can cause discomfort and/or radicular pain that might mimic musculoskeletal problems. The identification of prostate cancer is made more difficult by the absence of frequent screening and musculoskeletal symptoms.

We describe the case of a 62-year-old man who consulted a chiropractor for treatment of deteriorating left hip discomfort following a marathon but had no history of cancer or recent prostate cancer screening. The patient sought treatment from different medical professionals when it was suspected that he had degenerative problems; he was given acupuncture, physiotherapy, and nonsteroidal anti-inflammatory drugs. The chiropractor requested lumbar spine radiography, which indicated potential bone metastases and recommended a hip MRI in response given the patient's minimal improvement by other healthcare professionals and neurological complaints. The patient was sent to an oncologist after the patient's MRI results suspected prostate cancer. The oncologist underwent further imaging and testing to establish a presumed prostate cancer diagnosis. Nine cases of undetected

prostate cancer presented to a chiropractor for other symptoms, according to a literature search.

The study focuses on the requirement for a thorough examination of hip-pain patients during a chiropractic consultation owing to the possibility of prostate cancer. A hip examination has a greater likelihood of missing cancer signs. Chiropractors may be able to identify people with prostate cancer with the use of thorough examination and cutting-edge imaging.

## INTRODUCTION

Hip pain is a frequent and debilitating complaint in persons 60 years of age and beyond [1]. Hip discomfort can occasionally be caused by infection, aortoiliac insufficiency, or bone metastases [1]. Age also affects the incidence and mortality of prostate cancer [2]. The most prevalent malignancy that develops from bone metastasis is prostate cancer, which frequently invades the spine, pelvis, hips, or ribs [3]. Patients with metastases to the bones generally exhibit severe bone pain, nerve root discomfort, neurological impairments, or bladder dysfunction in the later stages. It can spread to the lungs, liver, pleura, and adrenal glands in later stages of metastasis [4]. Bone metastasis can cause persistent and incapacitating hip pain, while it is not frequent [1]. Testing for PSA, or prostate-specific antigen, is used to screen for prostate cancer. There is still controversy around testing, nevertheless, as there is no evidence that it can reduce the mortality rate from prostate cancer [5, 6]. Since urologists are more supportive of testing than general practitioners are, researchers hypothesised that PSA testing is widely employed in urological settings [7]. According to a poll, just 5% of the male respondents in Hong Kong [8] reportedly underwent PSA testing for prostate cancer screening, as in this instance. According to one study, individuals were not diagnosed until later stages of the disease due to insufficient prostate cancer screening and prostate cancer features [4,9].

Chiropractic professionals treat patients with neuromusculoskeletal issues as primary healthcare providers [10]. Serious diseases like cancer are uncommon for chiropractors to see in their practise [11]. Just around 0.25 percent of persons with low back discomfort had cancer, according to a Hong Kong

research [12]. Due to the impact on patients if prostate cancer is not recognised or treated, it is crucial for chiropractors to recognise such patients and send them to the proper healthcare providers for additional examination or treatment.

We present a rare case of left hip pain caused by bone metastasis from prostate cancer, which resulted in severe refractory hip pain and significant functional and quality of life impairments. This case highlights the increased incidence of prostate cancer and the potential for chiropractors to encounter undiagnosed cancer in the elderly population. We emphasise the critical role played by chiropractors in the detection of bone metastases and the importance of sharing clinical findings with radiologists and oncologists for more research and co-management.

## Case Presentation

Hip pain is a frequent and debilitating complaint in persons 60 years of age and beyond [1]. Hip discomfort can occasionally be caused by infection, aortoiliac insufficiency, or bone metastases [1]. Age also affects the incidence and mortality of prostate cancer [2]. The most prevalent malignancy that develops from bone metastasis is prostate cancer, which frequently invades the spine, pelvis, hips, or ribs [3]. Patients with metastases to the bones generally exhibit severe bone pain, nerve root discomfort, neurological impairments, or bladder dysfunction in the later stages. It can spread to the lungs, liver, pleura, and adrenal glands in later stages of metastasis [4]. Bone metastasis can cause persistent and incapacitating hip pain, while it is not frequent [1].

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on patients if prostate cancer is not recognised or treated, it is crucial for chiropractors to recognise such patients and send them to the proper healthcare providers for additional examination or treatment.

A 62-year-old male construction worker who had previously struggled with hypertension and hyperlipidemia presented with a seven-day history of sharp, stabbing pain in the front of his left groyne that had spread to the back of his leg and knee. After a marathon, the patient's pain was rated as being four out of ten on the numeric pain rating scale. The creeping pattern of pain and stair ascending mostly hindered his everyday activities and employment at the building sites, despite the fact that symptoms were relieved by rest. He denied experiencing any trauma, having a family history of diseases comparable to his, having an unexplained weight loss, a fever or night sweats for no apparent cause, being tired, or having any abnormalities in his bowel or bladder function. He did not come from a hip or metastatic disease-prone family. The person

The patient, a 70 kg, 170 cm Asian man, first went to his primary care doctor for hip discomfort following a marathon. He was also receiving medicine for hypertension and hyperlipidemia at the time. Without conducting any more research, it was determined that he had a soft tissue damage to the hip joint and treated with nonsteroidal anti-inflammatory drugs and sports therapy. For the patient, there was no recommendation for prostate-specific antigen (PSA) testing. Exercises to strengthen the hips and thermal ultrasound treatment were added in the sports rehabilitation. He also attempted acupuncture with a conventional doctor, but none of the treatments gave him long-lasting symptom alleviation. The patient sought chiropractic care to treat his hip discomfort conservatively.

The oncologist recommended a mix of therapies, such as androgen restriction, new hormonal drugs, systemic chemotherapy, and medications that promote bone resorption. At the clinic, the patient was given subcutaneous Enantone (11.2 mg), subcutaneous denosumab (120 mg), and bone resorption medications at the public hospital.

The patient was given the all-clear by the oncologist to continue receiving chiropractic treatments as they had already brought about some alleviation. The chiropractor and oncologist decided to keep performing rehabilitative exercises and soft manual joint manipulation for an additional 10 sessions. Also, it was suggested to undertake hip rehabilitation exercises at home for 15 minutes each day. Due to the existence of known

pathological fracture and metastases, which is regarded as a contraindication to spinal manipulation, only moderate treatment was offered.

The public hospital sent back the prostate biopsy after four weeks, and the cancer was verified. The patient's WHOQOL score increased from 50% to 70%, and his hip range of motion had already increased by 50%. The patient said that while he resumed the majority of his regular daily tasks and employment, he shied away from long distance jogging. He only ate out infrequently at family gatherings and only walked when he went grocery shopping. He was told to do rehabilitation exercises at home while getting medical attention. Seven months after being told that they had prostate cancer, the patient passed away from a lung infection.

## Discussion

In this instance, a senior male athlete who had previously sought treatment for a degenerative illness from other healthcare professionals is used as an example. After examining the patient's condition, the chiropractor requested a hip radiography. As warning signs emerged, an MRI was swiftly requested and revealed evidence of prostate cancer. The clinical oncologist was then consulted for more research and subsequent treatment of the patient.

This example illustrates how challenging it may be to diagnose prostate cancer in a guy who initially presented with what appeared to be a musculoskeletal condition. Chiropractors and other primary healthcare practitioners should be aware that this illness can hide its underlying aetiology by presenting with a variety of symptoms [3,4]. The absence of PSA testing in the present instance may be one of the causes of the delayed diagnosis. A thorough evaluation that includes a physical examination, radiographic imaging, and medical laboratory testing should be taken into consideration with regard to the patient history, even if the efficiency of PSA testing is still debatable [5]. In order to order sophisticated imaging methods like MRI or fluoro-2-deoxy-d-glucose positron emission tomography (FDG-PET), providers should be aware that radiography alone might not be sufficient for identifying cancer. The chiropractor was in charge of diagnosing patients and directing them to the best medical professional. Yet in this instance, the patient was able to receive symptomatic alleviation from the chiropractor. The current conservative approach to treating prostate cancer-related pain symptoms is centred on

the careful control of conventional musculoskeletal pain. There is no study on chiropractic rehabilitation for the treatment of cancer patients, and there is no set process. Seldom explored is the cautious administration of cancer research, and our case is another example for aspiring doctors. There is not enough research or established standards for chiropractic therapy for cancer patients because the majority of chiropractors do not treat oncology cases [14,15]. Neoplastic disorders are contraindicated for the chiropractic spinal manipulation approach [16].

Yet with careful thought, some low-force approaches or workouts could be advantageous and suitable for people with these disorders [15].

The search phrases "chiropractic," "chiropractor," "prostate," and "prostatic" were used in PubMed, Google Scholar, and the Index to Chiropractic Literature on December 28, 2022. All searches were restricted to English-language studies. Nine documented instances of prostate cancer that went untreated between 1986 and 2022 and sought chiropractic therapy were found in the search results [17–24]. Seven out of ten (70%) of these instances, including the present case, had spinal region pain (cervical, thoracic, and lumbar). In the first research, increased PSA values were only observed in two individuals [18, 22].

The patients in this instance, like those in other published cases, were all elderly men without a history of PSA screening who were later found to have prostate cancer that had spread to other body areas. While the patient's first complaints were of hip discomfort rather than back pain, this distinction may have contributed to the delayed diagnosis as metastasis sometimes manifests as low back pain if it affects the thoracolumbar and sacral regions [4,25]. This case serves as a reminder to healthcare professionals that prostate cancer can present with a variety of symptoms in elderly men and should be treated as a differential diagnosis.

Other than case reports and survey research, it is unknown how often undetected cancer presents itself to chiropractors [12,17,24]. Given the potential difficulty

Advanced imaging and comprehensive clinical data were used to confirm this case. The radiology and oncology teams' participation strengthened this argument. This case also looked at other published cases, highlighting the parallels and discrepancies between them. Our case, which was similar to those previously reported, featured an older man who had never had a PSA test but was later found to have prostate cancer metastases. The present instance, however, is special

because the patient's primary complaint was hip discomfort. The current instance is also one of the three cases where an MRI was done before the assessment stage. Although this disparity may be explained by the fact that earlier cases were recorded years ago, when MRI was commonly used, the current instance is different.

The importance of early MRI for chiropractors to find spinal metastases is also shown. The present instance, nevertheless, might not be widely generalizable. Chiropractic doctors may not have the authorization to order sophisticated imaging, such as an MRI, as the scope of practice differs by country. If the location frequently screens residents for prostate cancer, this issue may not be brought to the chiropractor. Also, there were no biopsy results in this case since the test was not performed by the same healthcare facility and the report could not be located. Finally, there was no real case of death found.

## Conclusions

If untreated prostate cancer spreads to other body areas and causes symptoms like hip pain and/or fatigue, patients may seek therapy from a chiropractor.

ache in the radicle. Chiropractic professionals should be aware of any warning signs shown on plain imaging and, if any, should make the necessary request for advanced imaging that might help in the early detection of prostate cancer. While dealing with a patient who has not yet been diagnosed with cancer, chiropractors should do a thorough examination in accordance with local regulations. The chiropractor should report patients to the appropriate healthcare professionals, such as oncologists, if the clinical or imaging evaluation indicates malignancy in order to guarantee prompt treatment.

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