# Metastatic Carcinoma of the Cervix Presenting as a Psoas Abscess in an HIV-Negative Woman

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## **ABSTRACT**

A case of advanced carcinoma of the cervix presenting as a psoas abscess is described. This unusual presentation has been reported in association with AIDS but is extremely rare in HIV-negative women. This case report emphasises the importance of awareness of unusual causes of the psoas abscess in an era when the classical tuberculous abscess is fast disappearing.

Keywords: squamous cell carcinoma, cervical cancer

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Fig. I CT scan showing the large left psoas abscess. A smaller right iliacus abscess and the cervical tumour are also visible.

# **INTRODUCTION**

Psoas abscesses are rarely encountered in present-day medical practice. The primary psoas abscess is believed to be formed by haematogenous spread of organisms from an asymptomatic site of infection. The usual pathogens are Staphylococcus aureus, Escherichia coli and Mycobacterium tuberculosis. Secondary psoas abscesses are usually a sequelae of direct spread from spinal infections such as spinal osteomyelitis but have also been described in patients with periappendicular abscesses, Crohn's colitis and carcinoma of the caecum<sup>(1)</sup>. We describe a rare case of secondary psoas abscess arising from an advanced squamous cell carcinoma of the cervix.

# **CASE REPORT**

A 28-year-old woman, para 4, presented to the Accident and Emergency Department of our hospital giving a history of progressively severe left iliac fossa pain over a period of three months. This was associated with a two-day history of fever and chills and a painful left hip. She also claimed to have lost a significant amount of weight over the last two months. Normal monthly menstrual periods had ceased since that time and she had developed a persistent light per vaginal bleed associated with a yellow, offensive vaginal discharge.

On admission, she was noted to be dehydrated and cachectic. Her left hip was maintained in a flexed position

and any movement of the joint caused severe pain. Abdominal examination revealed a tender, fluctuant mass over the left iliac fossa. The history of irregular vaginal bleeding prompted a speculum examination which revealed an ulcerative tumour which had replaced the entire cervix. On bimanual examination, a normal-sized uterus was found and the adnexae were not palpable. Per rectal examination revealed a thickened right parametrium suggestive of tumour infiltration. Carcinoma of the cervix was diagnosed and she was admitted for further investigations.

A computed tomography (CT) scan revealed a large septated left psoas abscess which was pointing at the level of the groin and a smaller right iliacus abscess (Fig. 1). A large cervical tumour as well as enlarged left pelvic and inguinal nodes were seen. There was no evidence of a hydroureter or hydronephrosis. Intravenous broad-spectrum antibiotics were commenced and, after discussion with an infectious disease physician, it was decided to attempt percutaneous drainage of the abscess. Under ultrasound guidance, aspiration of the left psoas abscess was performed and a "pig tail" catheter left in place for continuous drainage. This yielded a yellowish purulent fluid. The aspirate was sent for aerobic, fungal and mycobacterium tuberculosis cultures but all were negative. A cervical punch biopsy of the tumour confirmed a poorly differentiated squamous cell carcinoma. A test for the human immunodeficiency virus (HIV) was repeatedly negative.

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Following drainage of 500 ml of pus, no further drainage could be obtained from the abscess cavity. A repeat CT scan showed that the catheter was correctly positioned but the psoas mass was predominantly solid. This led us to believe that the psoas abscess was, in fact, a large mass of necrotic tumour. Cytology of the aspirate was consistent with this as it showed malignant squamous cells. Radiotherapy was considered as a therapeutic option but this was ruled out on the basis that the tumour was too extensive and treatment would not be of clinical benefit. Chemotherapy was offered but the patient elected to have only palliative care. At her request, she was transferred to a hospice and subsequently lost to follow up.

## **DISCUSSION**

This was an unusual presentation for a carcinoma of the cervix. The patient presented primarily for acute hip pain. The diagnosis of psoas abscess was suspected but the occult carcinoma of the cervix was only discovered when a careful history revealed long-standing vaginal discharge and bleeding. Carcinoma of the cervix spreads locally and metastasizes late. Death as a result of uraemia from ureteric obstruction usually supervenes before distant disease can manifest. This patient was unique in that she had such extensive distant metastases with no evidence of ureteric obstruction and also because she was unusually young at age 28. Invasive cervical carcinoma is now accepted as an AIDS-defining condition<sup>(2)</sup> and the presence of such an aggressive tumour in a young woman rightly aroused suspicion of AIDS. However, the patient was negative for the virus. Unusually aggressive manifestations of cervical carcinoma have been described in AIDS and there are case reports of psoas abscess-like metastases in these patients<sup>(3)</sup>. Such a presentation in a HIV-negative woman is extremely rare and a computer-aided MEDLINE search of the published literature revealed only one other case<sup>(4)</sup>.

Treatment proved to be a clinical dilemma in this patient. The presence of metastases contraindicated surgical treatment. Radiotherapy is effective in the local and regional treatment of cervical carcinoma but would not have been useful for the extensive intraabdominal tumour deposits in the psoas muscle. The poor sensitivity of cervical tumours to chemotherapy and the poor physical state of this patient made this option unacceptable.

This unusual case history illustrates the highly variable clinical course of squamous cell carcinoma of the cervix. In the context of a patient presenting with a psoas abscess, the classical tuberculous psoas abscess is now a rarity<sup>(1)</sup>. A heightened clinical awareness of the lesser-known aetiologies of this rare condition is therefore of utmost importance.

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# **REFERENCES**

- Walsh TH, Reilly JR, Hanley E, Webster M, Peitzman A, Steed LD. Changing aetiology of iliopsoas abscess. Am J Surg 1992; 163:413-6.
- Centers for Disease Control. 1993 revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. JAMA 1993; 269:729-30.
- Singh GS, Aikins JK, Deger R, King S, Mikuta JJ. Metastatic cervical cancer and pelvic inflammatory disease in an AIDS patient. Gynecol Oncol 1994: 54:372-6.
- Bar-Dayan Y, Fishman A, Levi Z, Rachmani R. Squamous cell carcinoma of the cervix with psoas abscess-like metastasis in a HIV-negative patient. Isr J Med Sci 1997; 33:674-6.