diagnostic laparotomy and an empirical trial of BEP (Bleomycin, VP16, Cisplatinum) chemotherapy was commenced. She subsequently developed pancytopenia at which time a bone marrow examination revealed focal infiltration by malignant epithelial cells. After an initial improvement the patient died.

At necropsy the pituitary fossa was extensively infiltrated by tumour with erosion of the right sphenoid bone and extension into the right orbit. The bladder was markedly thickened by tumour with diffuse mucosal ulceration and an intact serosal surface. No other primary neoplasm was identified. Microscopy of the bladder tumour and of the pituitary infiltrate showed a poorly differentiated transitional cell carcinoma with focal squamous differentiation.

This is the first reported case, to our knowledge, of a patient with transitional cell carcinoma of the bladder whose clinical presentation was due to pituitary fossa involvement by secondary tumour. Metastatic disease of the pituitary fossa usually develops late in the course of disseminated malignancy.³ Previously reported cases of pituitary involvement by bladder carcinoma were incidental findings at autopsy.⁴

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References

1. Angulo, J.C., Lopez, J.I., Unda-Urzaiz, M. & Flores, N. Urinary bladder cancer initially manifested as brain metastases. *Postgrad Med J* 1992, **68**: 150–151.
2. Le Chevalier, T., Smith, F.P., Caille, P. & Rouesse, J.G. Sites of primary malignancies in patients presenting with cerebral metastases. A review of 120 cases. *Cancer* 1985, **56**: 880–882.
3. Kovacs, K. Metastatic cancer of the pituitary gland. *Oncology* 1973, **27**: 533–542.
4. Tearn, R.J. & Silverman, E.M. Clinicopathological review of 88 cases of carcinoma metastatic to the pituitary gland. *Cancer* 1975, **36**: 216–220.

Bilateral tubercular psoas abscess mimicking bilateral hydronephrosis – the role of computerized tomography in the management

Sir,

A 16 year old boy presented with gradually increasing kyphosis since childhood, pain in the right flank, decreased urine output and intermittent swelling of feet, face and abdomen of 6 months duration. On examination he had kyphoscoliosis, pectus excavatum and palpable masses in both flanks. Intravenous urogram did not show functioning kidneys even in delayed films. Abdominal ultrasonography showed fluid-filled spaces in the renal fossa and a diagnosis of bilateral hydronephrosis due to ureteropelvic junction obstruction was suggested. Ultrasound-guided needle aspiration yielded creamy pus from both cavities and a pigtail catheter was left for drainage. The smear examination and culture of the pus

was positive for *Mycobacterium tuberculosis*. The dye study done subsequently through the catheter gave an impression that the catheter was extra renal in a psoas abscess. Computed tomography then demonstrated bilateral psoas abscesses, destruction of vertebral bodies, with the presence of normal functioning but displaced kidneys on both sides.

A total of 1000 ml of pus was drained from the right side and 750 ml from the left. Therapy for tuberculosis was given for 9 months and the patient has made an uneventful recovery with complete resolution of both psoas collections and the kidneys returning to their normal positions.

It is well known that spinal disease may present with abdominal symptoms but review of urological, radiological and orthopaedic literature emphasizes the rarity, delayed presentation, diagnostic difficulty, and non-specific radiological features of tubercular psoas abscess and late diagnosis of all forms of tuberculosis especially spinal tuberculosis.^{1,2}

Improved methods of visualizing the anatomy and pathology of the retroperitoneum and the psoas muscle now exist with the development of ultrasonography. Still one can wrongly diagnose a psoas abscesses as bilateral hydronephrosis, if one does not specifically look for the kidneys when they no longer remain in their normal positions and are displaced by the fluid collection, as happened in our case. The complementary use of computed tomography with its exquisite organ specificity and the advantage of density discrimination helps to clinch the diagnosis early and resolve the confusion. Recent reports document the successful treatment of psoas abscesses by percutaneous drainage which seems to be preferable to formal surgical drainage.³

We conclude that there should be heightened clinical awareness of the condition. This high index of suspicion coupled with early CT evaluation and judicious use of ultrasonographically guided aspiration will lead to an early recognition of the disease, and its cure.

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References

1. Walker, G.F. Failure of early recognition of skeletal tuberculosis. *Br Med J* 1968, **1**: 682–683.
2. Home, N.W. Problem of tuberculosis in decline. *Br Med J* 1984, **288**: 1249–1251.
3. Clementsen, P., Hansen, M., Convad, C. & Myhre, O. Percutaneous drainage of tubercular abscess of the psoas muscle. *Tubercle* 1988, **69**: 63–65.

***Enterobius vermicularis* live adult worms in the high vagina**

Sir,

I present an unusual case of *Enterobius vermicularis* adult live worms recovered from the high vagina. To my knowledge no such case has been reported in the literature.

A 28 year old nulliparous woman presented with intense vulval itching associated with scanty vaginal discharge. Two months previously she had similar symptoms and was treated with clotrimazole vaginal cream with some improvement. For her present symptoms she was again treated with clotrimazole 2% cream (Cane-sten). Eight days later she returned with worsening of her symptoms. Physical examination showed an inflamed and chafed vulva. Speculum examination revealed a healthy cervix and vagina. There was slight non-offensive vaginal discharge. Six live adult worms of *E. vermicularis* were recovered from the anterior fornix of vagina. A high vaginal swab for pathogenic organisms or the ova of the parasite was negative. There were no masses palpable per abdomen. After a single dose of mebendazole 100 mg she remains asymptomatic.

E. vermicularis infestation is one of the commonest helminthic infections of man, more prevalent in the temperate zone than in tropical regions. The male is 5 mm long and the female 13 mm long and both reside in the caecum, terminal ileum, ascending colon and the appendix. The gravid female worm descends to the anus to lay her eggs in the perianal region and soon dies. The eggs which become infective within a few hours, may be swallowed by the host by autoinfection and the larva matures in the lumen of the intestine of the host. There is no visceral migration of the worm. The life-cycle of the parasite is completed in 6 weeks.¹ The most common presentation is pruritus ani and the stool examination for the eggs is negative but adult worms may be passed in the stool occasionally.

Migration of the adult worm to an ectopic site is rare.² The worm or its eggs in the ectopic site set up an inflammatory reaction and a granulomatous lesion is produced. Such granulomatous lesions themselves are asymptomatic but are found at the time of laparotomy or other investigations for some other medical condition and have been reported in the uterus, fallopian tubes, ovaries and pelvic peritoneum, prostate, lung and liver.³ They

raise the suspicion of tuberculosis and neoplasm as a differential diagnosis.⁴ Occasionally the parasite may get lodged in the appendix and produce acute appendicitis.¹ Ova of *E. vermicularis* in vaginal smears with or without inflammatory reaction have been reported.⁵

The case presented here is unusual because six live adult thread worms were recovered from the anterior fornix of the vagina, and pruritus vulvae was not associated with pruritus ani. The symptom disappeared after treating the threadworm infection and proves that the finding of the live adult worms was not an incidental finding as is usual with the asymptomatic granulomatous lesions in the ectopic sites discussed above. It is worth noting that no cases involving peritoneal cavity have been reported in men. The finding of the live adult worms of the *E. vermicularis* in the high vagina lends support to the theory that the worm and its eggs gain access to the peritoneal cavity through the ascending pathway of vagina, uterus and Fallopian tubes.

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References

1. Zaman, V. Enterobiasis. Section 5. *The Oxford Textbook of Medicine*, 2nd ed. Oxford Book Publications, Oxford, p. 552.
2. Symmers, W.St.C. Pathology of oxyuriasis. *Arch Pathol* 1950, **50**: 475–516.
3. Beaver, P.C., Kriz, J.J. & Lau, T.J. Pulmonary nodule caused by *Enterobius vermicularis*. *Am J Trop Med Hyg* 1973, **22**: 711–713.
4. McMahon, J.N., Connolly, C.E., Long, S.V. & Meehan, F.P. *Enterobius* granulomas of the uterus, ovary and pelvic peritoneum. Two case reports. *Br J Obstet Gynaecol* 1984, **91**: 289–290.
5. Mayayo, E., Mestres, M., Sarmiento, J. & Cambor, G. Pelvic oxyuriasis – a case report. *Acta Obstet Gynaecol Scand* 1986, **65**: 805–806.