

Figure 2: Bone marrow trephine biopsy infiltrated by a tumour composed of insular clusters of cells displaying numerous mitoses and peripheral palisading of nuclei (H/E x90)

cer patients, often in the advanced stage.<sup>1</sup> Carcinoma cervix rarely leads to CM.<sup>2</sup> Our patient presented with multiple cranial nerve palsies, which is a relatively common neurological condition encountered in practice. MRI brain showed features of pachymeningitis, which is not specific for any particular aetiology. Diffuse meningeal enhancement on MRI can occur due to a wide variety of conditions, which include infectious (bacterial, fungal, tuberculous, etc.), inflammatory (sarcoidosis, collagen vascular diseases, etc.), carcinomatous (cancerrelated), reactive (due to surgery, shunt or trauma), and chemical (due to ruptured cysts or intrathecal chemotherapy) causes.<sup>3</sup> Though the exact aetiology can often be determined on the basis of history, clinical examination, CSF analysis and other investigations, it could be challenging at times. However, it is vital to identify the aetiology in order to institute the correct treatment. CM usually occurs in patients with known cancer. Therefore, it should be suspected in patients with a history of malignancy, who present with an isolated neurological sign or symptom. However, confirming a diagnosis of CM might prove to be difficult. Repeated CSF analysis for detecting neoplastic cells is advised, as a single lumbar puncture might yield negative results.<sup>4</sup> Our patient did not show neoplastic cells even after three lumbar punctures. Though MRI findings are nonspecific, it has been suggested that patterns of meningeal enhancement vary in different aetiologies. Infectious meningitis often results in leptomeningeal (pia and arachnoid) enhancement, when enhancement of the meninges follows the convolutions of the gyri and/or involves the meninges around the basal cisterns; whereas carcinomatous meningitis causes pachymeningeal (dura) enhancement, when the enhancement is thick and linear or nodular along the inner surface of the calvarium, falx, or tentorium without extension into the cortical gyri or basal cistern involvement.<sup>3</sup>

Common sites of distant metastases in carcinoma cervix are liver and lung parenchyma. Brain metastases from cervical carcinoma are uncommon and occur in only 1% of all cervical carcinoma.<sup>5</sup> The median interval between the diagnosis of cervical cancer and documentation of brain involvement is 18 months,<sup>5</sup> however, occasionally, this can be as short as one week.<sup>6</sup> In our patient, the detection of neurological disease preceded the diagnosis of carcinoma cervix. To the best of our knowledge, this has not been reported before.

In conclusion, the present case highlights the difficulty in diagnosing CM, especially in a patient previously not known to have a malignancy. It also emphasizes the importance of simple procedures such as bone marrow biopsy and gynaecological examination in women presenting with features suggestive of pachymeningitis, in disclosing an unknown malignancy.

### Kumar S, Nair S\*, Alexander M

Departments of Neurological Sciences and \*Pathology, Christian Medical College, Vellore - 632004, Tamilnadu, India.

Correspondence:

Sudhir Kumar. E-mail: drsudhirkumar@yahoo.com

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# Post coital hematuria: presentation of an uncommon case

Sir,

Isolated post-coital hematuria without hemospermia is a rare clinical presentation. It is usually benign and the aetiology is often not diagnosed despite extensive investigations. We recently encountered such a case where the aetiology was diagnosed after extensive, and possibly unnecessary evaluation; and the patient was being successfully managed using the holmium laser.

A 33-year-old male presented with complaints of hematuria after coitus for the past five years. Hematuria used to occur only once after the act and recurred every few weeks. It was painless and the patient did not have any history of hemospermia. He was married 10 years back and had two children. General and systemic examinations were unremarkable. Urine, biochemical and semen examination were normal with complete absence of red blood cells in the semen. Urine cytology for malignant cells, stain for acid fast bacilli and Polymer-

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ase Chain Reaction for Myobacterium tuberculosis (PCR-MTB) were also negative. Abdominal and transrectal ultrasonography, micturating cystourethrogram and retrograde urethrogram were also normal.

Cystourethroscopy performed under local anaesthesia did not reveal any abnormality. Magnetic resonance imaging of the pelvis showed abnormal vascularity in the region of the pubis with no clear vascular channels. Digital subtraction angiography with selective internal pudendal artery cannulation was then performed, before and after induction of a pharmacological erection using 30 mg of intracavernosal papaverine. Delayed phase image revealed an area of vascular blush and retention of contrast at the inferior border of the pubic bone.

The patient underwent cystourethroscopy under general anaesthesia, immediately after planned sexual intercourse. An erythematous plaque-like lesion with dilated vessels running over the surface of the urethra was seen distal to the tip of verumontanum. A cold-cup biopsy was taken and the leash of blood vessel along with the plaque was fulgurated using the holmium:YAG laser at a setting of 12 Watts through a 550 micron fibre. Histopathology revealed a urethral polyp with numerous vascular channels, possibly a vascular hamartoma. At six months of follow-up, the patient is asymptomatic.

Post-coital hematuria has usually been correlated with hemospermia.<sup>1</sup> A common cause of hematuria and hemospermia in young men is benign papillary adenoma.<sup>2,3</sup> Isolated hemospermia is a more common clinical condition and is often due to infections and inflammations though in up to 40% of these cases, the cause in indeterminate.<sup>4</sup> Post-coital hematuria without hemospermia is rare. Aliabadi et al<sup>5</sup> report a case of benign prostatic utricular papilloma presenting with post-coital urethral abnormal bleed and multiple episodes of hematuria but no hemospermia.

The post-coital hematuria in our case may be explained by the

vascular smooth muscular response to the changes in autonomic innervation during the ejaculation supplemented by the increased blood flow and increased pressure generated in the posterior urethra due to the closure of the bladder neck.

Though most cases of post-coital hematuria are benign, the presentation is frightening and requires evaluation. Our case demonstrates the extent to which such investigations may need to go before the diagnosis can be made. However, in retrospect, we believe that cystourethroscopy after simulation of the circumstances of bleed may demonstrate the lesion, obviating extensive evaluation.

This is the first report regarding the use of holmium: YAG laser in the fulguration of such abnormal vascularity/ hamartoma of the prostate. The advantage of the laser lies in its precision, avoiding damage to external sphincter. No urethral catheter was required and the patient was discharged the same evening. The only disadvantage with the laser is the non-availability of proper tissue for histopathological examination.

## Kumar R, Kesarwani P, Shrivastava DN\*, Hemal AK

Departments of Urology and \*Radiology, All India Institute of Medical Sciences, New Delhi, India.

Correspondence: Rajeev Kumar, E-mail: rajeevk@bol.net.in

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