INTRODUCTION
Vaginal leiomyoma is a rare solid tumour, with a variable clinical presentation and broad differential diagnosis that can lead to pre-operative misdiagnosis. The tumour is usually encountered in the midline anterior vaginal wall. We report a case of vaginal leiomyoma in close contact with the urethra, which was treated by vaginal approach, and review the literature.

CASE REPORT
A nulliparous 23-year-old woman presented to our out-patient department with a 2 months history of a painless mass associated with severe dyspareunia, dysmenorrhoea and vaginal discharge, when she became sexually active and also feeling of a burning sensation after intercourse for several days. She had difficulty in starting micturation with a poor and misdirected stream. The patient did not report dysuria, hematuria or menorrhagia. Her general medical history was un-remarkable.

External genitalia were normal. Per vaginam, a firm (tense) mass 6 x 5 cm was palpated in the anterior vaginal wall, which was slightly tender, non-mobile and with a smooth surface, involving the whole length of the vagina, starting from urethral meatus, and displacing the external urethral meatus. Stress incontinence could not be demonstrated and the cervix was not visualized. Uterus and adnexa were un-remarkable.

Pelvic ultrasound scan showed a lobulated isoechogenic mass measuring 6 x 5.7 x 5.3 cm studding the vagina. Uterus, cervix and endometrium were normal. A micturating cistourethrogram was normal.

The patient underwent examination under general anaesthesia, urethrocystoscopy and biopsy was taken. Histopathology report was of leiomyoma. Finally, excision of the mass was planned. Urethral opening was shifted to one side. To remove the mass, a vertical incision was made through the anterior vaginal wall and a solid mass was enucleated, which was involving the whole length of vagina (Figure 1). The tumour got separated from urethra easily and were dissected from the surrounding tissue (Figure 2). A two-layer closure was performed and no significant bleeding was recorded. Patient was discharged on 3rd postoperative day after removal of Foley's catheter. She returned the same day with retention of urine, was re-catheterized and sent home with catheter. She was called after one week for removal of Foley's catheter, which was finally removed after 12 days. Definitive histological findings reported benign spindle cell lesion, most likely leiomyoma.

There was no postoperative complication and she gained normal lower urinary tract function after the removal of catheter.

On 3 months follow-up, clinical examination showed normal vaginal anatomy and normal urinary function and the patient was symptom-free.

DISCUSSION
Approximately 300 cases of vaginal leiomyomas have been reported in world literature. Most vaginal fibromata
Paraurethral leiomyoma

Vary between 1 and 5 cm but some may reach 10 cm in size and weigh up to 1450 gm. Although these rare tumours are obvious on vaginal examination, the clinical presentation varies and can lead to pre-operative misdiagnosis. In the early stage, they are generally asymptomatic, but with increasing size they can start compressing adjacent organs. As the ensuring symptoms derive from the size of the mass and from its site, the clinical presentation may vary greatly. Vaginal leiomyoma may develop anywhere in the vagina but is usually found on the anterior wall and causes combination of discomfort and urinary symptoms, such as frequency, urgency, dysuria and postvoid residual urine. Feeling of perineal heaviness and in some cases dyspareunia, vaginal ulcers and spotting are present. Indeed, vaginal leiomyomas had been termed “the female prostate.”

In 2002, Shimada et al. reported the first case of leiomyoma originating on the posterior vaginal wall which was associated with lumber pain due to compression of the pelvic ligaments. The variable consistency of these lesions can cause diagnostic confusion. Transabdominal / transvaginal ultrasonography and MRI are helpful in establishing the morphology and relationship with adjacent anatomic structures although these tests are not mandatory pre-operatively. The differential diagnosis includes cystocele, urethrocele, Gartner’s duct cyst, urethral diverticula, vaginal cyst, Bartholin gland cyst and vaginal malignancy.

Leiomyoma is definitely diagnosed only on histological findings. Histology consists of a mixture of smooth muscle and fibrous stroma and a myoma, fibromyoma or fibroma. Surgical enucleation is the treatment of choice via vaginal approach. Though benign and slow growing vaginal leiomyoma may occasionally recur, Bapuraj et al. recently reported the first pre-operative leiomyoma embolisation, which was associated with a marked reduction in intra-operative blood loss. The procedure is indicated in large hyper-vascularized tumours presenting with haemorrhage. Rywlin et al. observed some cases of recurrence and one transformation into sarcoma.

The present case was a slow growing tumour in paraurethral location with micturation and local contact complaints who responded well to surgery. The urinary symptoms after surgery required catheterization for 12 days, which was likely to be due to the original location of the tumour.

REFERENCES