# Uterovaginal Prolapse Mimicking Rectal Tumour: A Diagnostic Pitfall During Pelvic CT Scan.

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#### Citation

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#### **Abstract**

Uterovaginal Prolapse mimicking rectal tumour has probably never been reported before.

Asymptomatic prolapse of the uterus is very common. About 50% of parous women have some degree of genital prolapse but only about 10-20% of these cause symptoms3. The purpose of this case report is to alert the clinicians that in every elderly female patient showing mass in the antero-lateral or anterior aspect of Rectum during CT scan, a diagnosis of Uterovaginal prolapse should be considered in the differential diagnosis.

### **CASE REPORT**

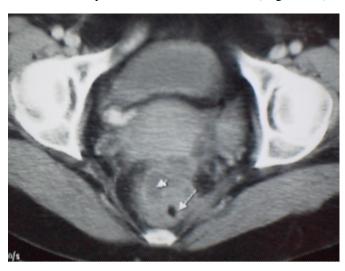
A 67-year-old female was admitted through the Casualty Department. She had a history of constipation, for which she used to take purgatives. There was an altered bowel habit of a duration of six months. There was no history of weight loss or rectal bleeding. At this time she had severe rectal pain. She had a past history of diverticular disease. The routine blood, LFTs, Renal function tests and ultrasound of the upper abdomen were normal. The patient had no other complaints.

On examination, there was a pussy discharge from rectum. On PR exam, a large mass was felt towards the anterior wall of the rectum that appeared fixed to the rectal wall. The sigmoidoscope could not surpass 20 cms. A biopsy was carried out. Three specimens were sent for histopathological reports, which showed benign changes and were negative for malignant cells. U/S examination of the abdomen and pelvis were normal. Helical CT scan with oral and IV contrast were carried out which showed a hypodense mass involving anterior wall of the rectum compromising the lumen. Fig 1&2.

The patient was taken to the operation theatre. An extended examination under general anaesthesia was carried out. A definite diagnosis of grade I prolapse uterus was made.

## Figure 1

Figure 1: CT Pelvis showing mass lesion(small arrow) in the antero-lateral aspect of narrowed rectal lumen(large arrow)



## **DISCUSSION**

The pelvic floor is composed of layers of muscle and fascia. The pelvic floor in adult women is inherently weak. Therefore, when torn by parturition, it may never regain the strength to maintain the genital organs within the intra abdominal cavity. The muscles of the pelvic floor, comprised mainly of levator ani and coccygeus, arise on each side from the pelvic side wall and unite in the midline to form the anococcygeal raphe.4

The urethra, vagina and rectum pass through a hiatus in the levator plate and each of these tracts has fibres of the levator muscle inserted into it. In the normal woman standing erect,

the levator plate is nearly horizontal, with rectum, vagina and uterus resting on it. When there is a rise in intraabdominal pressure, the pelvic floor contracts and pushes the pelvic viscera towards the pubic symphysis, increasing the closure pressure of the urethra. The uterosacral ligaments are condensations of pelvic fascia, which help to maintain the cervix in a posterior position over the levator plate. The lateral cervical ligaments provide lateral support for the cervix and upper vagina. The round ligament helps to maintain the uterus in anteversion. Once the pelvic floor is weak by any cause, it will initially cause the levator plate to become more oblique or vertical, creating the funnel which will allow the uterus, vagina and rectum to herniate through the levator hiatus4. In a large series, only 25% of patients showed some difficulty in defecating but no patient complained of severe rectal pain<sub>5</sub>.

Our patient had Grade I Uterovaginal prolapse, which means that the cervix descends within the vagina but not as far as the introitus. Our case is unique in the sense that literature searches did not reveal any patient of uterovaginal prolapse presented only with rectal pain and no case has been reported regarding pitfalls in the CT diagnosis.

#### CONCLUSION

Asymptomatic prolapse of uterus is very common. About 50% of parous women have some degree of genital prolapse but only about 10-20% of these cause symptoms.3 The incidence increases with age<sub>1</sub>. Prolapse uterus is common in whites, less common in Asians and uncommon in blacks<sub>2</sub>. To the best of our knowledge, no similar case has been reported in the literature.

It is advisable, that in any elderly patient having CT scan of pelvis and showing mass in the rectum, a diagnosis of uterovaginal prolapse should be considered in the differential diagnosis to avoid a false positive diagnosis.

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