# ACUTE ONSET INCOMPLETE UTERINE INVERSION CAUSED BY A LARGE SUBMUCOSAL FUNDAL SESSILE FIBROID: A CASE REPORT

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**INTRODUCTION:** Puerperal inversion occurs in 1: 3500 deliveries. <sup>1</sup> Non Puerperal inversion of uterus is a very rare finding. Non Puerperal inversion of uterus can be caused by a pedunculated tumor attached at the fundus or by leiomyoma of uterus<sup>2</sup>. Sessile fundal fibroid causing uterine inversion has either not been individually cited or no particular reference has been made. The fundal fibroid causes thinning and weakness of uterine wall due to pressure atrophy. Contraction of uterine musculature excited by the prolapse of the tumor into the cavity causes inversion of uterus. A fundal fibroid can cause uterine inversion only if it is sufficiently large and heavy. This process takes years making uterine inversion due to myoma a rare possibility simply because submucosal myomas produce a variety of symptoms such as menorrhagia or vaginal discharge before the occurrence of inversion and women usually seek help for various reasons, quite early in the course.

We present a report on a case, of a large sessile fibroid presenting only, with features of off and on bleeding per vaginum with dull lower abdominal pain, for a short duration of 15 days.

**CASE REPORT:** A 40 years old lady, P <sub>3+0</sub> presented to our OPD, with off and on bleeding per vaginum and dull lower abdominal for 15 days. On examination her general condition was within normal limits with mild pallor. On per abdominal examination, a lump of 14 week size could be palpated. It was firm with well defined margins. The lower limit could not be reached and mobility was moderately restricted. On per speculum examination there was mucopurulent discharge present with offensive smell. A mass of 6x8 cm size, could be seen, protruding through cervical os. The mass filled most of the vagina, was congested and ulcerated at places. A sound test was done and the sound could be passed all round the pedicle and cervical canal. Bimanual examination revealed that, uterus was symmetrically enlarged, to about 14 weeks size, mobile and non tender. The cervix along with the polyp could be moved with the movement of uterus. An ultrasound was performed which confirmed the diagnosis of Fibroid polyp. As the patient had menorrhagia, a fibroid filling the uterine cavity, most part of vagina, and the patient had completed her family, it was decided to perform Total abdominal Hysterectomy in the present case. Per operatively, there was an enlarged uterus of 14 weeks size and two indentations of about 3 cm in length were seen in uterine fundus, suggestive of inversion of uterus in early stages. Total abdominal hysterectomy was performed. Ovaries and tubes were normal. After hysterectomy, the cut section revealed, a submucosal sessile fibroid of 10x12 cm size, found attached to fundus. The prolapsed part was beefy red and congested. The specimen was duly sent for histopathological examination. The woman had speedy postoperative recovery.

**DISCUSSION:** Non puerperal uterine inversion is a rare entity. Gomez-Lobo et al, <sup>3</sup> reported 150 cases of non-puerperal uterine inversions documented from 1887 to 2006. Kilpatrik et al<sup>4</sup> reported

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that only 100 times cases of chronic uterine inversion of nonpuerperal uterus. Prolapsed fibroids tend to be a result of uterine neoplasm and endometrial polyps as cited by many, and of these non-puerperal inversions are usually caused by intrauterine tumors. Mwinyoglee et al, <sup>5</sup> reported that 97.4% of uterine inversions are associated with tumors, out of which 20% were malignant, while Takano et al, <sup>6</sup> reported that 71.6% of cases of uterine inversions were caused by tumors. Most of the reported cases are chronic with a very few percentage being reported as acute in onset. Of all the reported cases, inversion is mostly a result in pedunculated submucosal fibroid polyp with a very few number caused by sessile fibroids. The probable explanation is that, in a pedunculated fibroid polyp, the thickness of the pedicle determines the extent of prolapse and resultant inversion of uterus.<sup>7</sup> Sessile tumors have no pedicle and therefore have a rare possibility of causing prolapse. So, the only explanation is, probably, fundal attachment with an axial descent due to gravitational pull. Risk factors for uterine inversion may include fundal attachment of tumor, thickness of the tumor pedicle, tumor size, thin uterine wall and dilatation of the cervix <sup>8</sup> as was the case with our patient.

Uterine inversions can be classified as follows:

- i. stage 1: the inverted fundus remains in the uterine cavity,
- ii. stage 2: complete inversion of the fundus through the cervix,
- iii. stage 3: the inverted fundus protrudes through the vulva,
- iv. stage 4: inversion of the uterus and the vaginal wall through the vulva.9

Our case presented as Stage 1. Non-puerperal inversion can also be classified into acute and chronic uterine inversions. Nonpuerperal uterine inversions are usually chronic; however, 8.6% of the cases are of acute onset.<sup>10</sup> Symptoms of non-puerperal uterine inversion are vaginal bleeding, vaginal mass or offensive vaginal discharge. Other symptoms include lower abdominal pain and urinary disturbance<sup>11</sup>. In addition the patient may complain of pressure in the vagina or of something protruding or coming down the vagina. <sup>7</sup> Usually, these symptoms are chronic with insidious onset and evolution. Most cases also have moderate or severe anaemia. On the other hand, acute cases have a dramatic presentation of severe pelvic pain and varying degree of hemorrhage. Our case presented with acute onset of symptoms with only mild anemia and menorrhagia. Though there was presence of dull pain and the menorrhagia, for 15 days, the duration of the symptoms prompted us to categorize it as acute onset, and also the fact that the patient had been apparently asymptomatic before that.

Magnetic resonance imaging (MRI) and computerized tomography (CT) scan, are useful diagnostic tools. MRI can examine the characteristic image of uterine inversion. A U-shaped uterine cavity and a thickened and inverted uterine fundus on a sagittal image and a 'bulls-eye' configuration on an axial image are signs indicative of uterine inversion. <sup>12, 13</sup> Conclusion

From the above observation, we can realized that sub mucosal myoma fundal in origin if left unattended for a long time one day will ultimately produce uterine inversion once it grows sufficiently large. However, a possibility of uterine inversion should never be overlooked if an associated mass is present or if the symptoms or its duration has been short.

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