

Look for Cervico Fundal Sign in Women With Previous Caesarean

Shirish S. Sheth, Archana R. Rao

Breach Candy Hospital & Research Centre and Sir Harkisondas Nurottandas Hospital, Mumbai, India

Summary

A small series of 15 cases with history of two or more caesarean sections in the past is presented where preoperative diagnosis of dense adhesions between uterocervical surface, bladder and lower abdominal wall was made with the help of the "cervico fundal sign" through it's classical findings on clinical examination.

Introduction

Adhesions after caesarean is a well accepted sequelae and would invite attention only when it produces symptoms and/or is visualized at surgery, laparoscopy or laparotomy. Its extent can vary from the flimsy, insignificant adhesion at varying sites to dense, tough to lyse and restore normalcy present at the location of surgical incision. Interestingly, all the present cases show identical findings at the operation table, which were suspected from identical clinical findings or from the presence of cervico fundal sign in them.

If the speculum and bimanual examinations findings suggest cervical displacement with disproportionately high placed fundus and or traction on the cervix, if possible, visibly pulls the abdominal wall inwards suspect dense adhesions between the uterus, bladder and lower abdominal wall and keep this

in mind while managing further or future operative procedures related to the lower abdomen and/or pelvis. It is important to routinely perform speculum examination in all women who have had caesarean section in the past.

Methods and Material

The present set of women with history of two or three caesarean sections in past presented with a history of heavy menses and/or lower abdominal pain in 7, and vague, unrelated symptoms in the remaining 8. There was no history of any other abdomino-pelvic surgery in the past, the pain was lower abdomino-pelvic, dragging or dull in nature, often continuous and unrelated to menstruation.

Clinical examination revealed normal abdominal findings. It was speculum examination

immediately on insertion of Sim's speculum that revealed typical findings, pointing to the presence of uterocervical adhesions to the lower abdominal wall the 'Cervico fundal sign" reported in 1997 (Sheth et al 1997). Presence of this sign was judged from (1) Finding the stretched posterior vaginal wall pulled upwards in its upper half and inability to visualize cervix or barely visualized part of its even after use of an anterior vaginal wall retractor or Vulsellum (2) Cervix was high, is elongated and almost behind or close to the pubic symphysis facing the upper vaginal wall and uterine fundus, despite a normal size uterus, somewhere between pubic symphysis and umbilicus. Traction on the cervix, with some difficulty, pulled the lower abdominal wall inwards, almost dimpling it. It was not possible to palpate the uterus. The uterus was immobile and felt with difficulty giving an impression that the uterus is one with the abdominal wall and the fundus is rather highly placed and not commensurate with uterine size. Displacement of the uterine fundus gave a (pseudo) impression of uterine enlargement. There were no other abnormal or significant findings.

Sonography findings were normal, except for 1 to 3 cms size insignificant fibroids in 3 women, the elongated cervix and highly placed uterine fundus were noted by the sonologist, particularly, because of the discussion of the case earlier with him.

MRI done in earlier cases to prove and establish the diagnosis showed that the uterus was of almost normal size with the fundus located high at the L3 to L5 intervertebral disc level, almost 4 to 6 inches above the symphysis pubis, at level varying between the symphysis



Figure 1.: Shows uterine fundus located unduly high and adhesions between the uterocervical surface and abdominal wall.

pubis and the umbilicus. The anterior wall of the uterus was adherent to the anterior abdominal wall as evidenced by obliteration of the fat plane. MRI additionally revealed that the uterine cervix posterior to the bladder was elongated, facing the upper third of the posterior vaginal wall (Figure 1 & 2). Absence of fat between the cervix and bladder suggested the presence of adhesions.



Figure 2.: Shows displaced elongated cervix behind the symphysis pubis facing the upper third of the vaginal wall and also adhesions between the bladder and cervical surfaces.

All women were scheduled for hysterectomy as treatment for dysfunctional uterine bleeding and/or chronic, unacceptable pain. The abdomen was opened by transverse incision placed much higher than the regular Pfannenstiel incision. The peritoneum was opened at the highest point after separating the underlying muscles from the surface of the rectus sheath as high as possible. Peritoneal opening demanded extra care and patience. On opening the peritoneal cavity, the uterine fundus with the surface of the uterine body was visible (Figure 3). The uterus along with the elongated cervix was displaced markedly upward and anteriorly almost as a part of the abdominal wall, with loss of uterine and cervical mobility. Further, the lower part of the uterus and the urinary bladder were found to be densely adherent to the lower anterior abdominal wall, with an obliterated uterovesical pouch of the peritoneum. The uterine fundus was free, along with the adjoining part of the uterine body, enabling identification of at least one round ligament easily or after some painstaking adhesionolysis; the cervix was distinctly elongated, necessitating deep dissection to complete total hysterectomy.



Figure 3: Shows fundus and small part of the uterine body & remaining uterus along with cervix as well as bladder are densely adherent to lower anterior abdominal wall; fingers on uterine fundus.

Careful dissection and separation was directed to first reach and visualize the round ligament on the easier side. This proved of immense help for further adhesionolysis and to separate the bladder from the uterocervical surface as well as the abdominal wall and complete the hysterectomy with bilateral salpingo-oophorectomy. Thick bands, conglomerated fibrous tissue from separated adherent uterus to abdominal wall, needed excision to even the undersurface of the abdominal wall. The post-operative period was uneventful in all women except for wound infection with superficial gaping in two, which responded to routine management.

Discussion

Caesarean section can sometimes leave behind

dense adhesions at a select site. The diagnostic information gathered from speculum and bimanual examination eliciting the cervico-fundal sign was of immense help in anticipating the pathological dense adhesions described above, and giving appropriate treatment and avoiding possible complications.

Therefore, it should be mandatory for every woman with a previous caesarean, particularly those with more than one, to have a careful speculum examination to look for this sign. Omission could prove hazardous.

Sonography will not reveal the above findings, though the sonologist may mention the high position of the fundus, if an inkling is given to him earlier. It is MRI which can clinch the diagnosis of such dense adhesions and give clear directions for the surgical management. However, this was not advised in our 13 cases because of the huge expenses involved.

Clinical diagnosis of the adhesions described above avoided diagnostic laparoscopy to find the cause of pain and thus avoid possible trauma to the displaced adherent bladder. Arriving at the diagnosis of adhesions preoperatively, has the following advantages (1) It explains the cause of pain (2) It invites careful examination under anaesthesia (3) It spares diagnostic laparoscopy or gives a warning for a very cautious insertion of trocar (4) It spares attempting VH or LAVH (5) It explains difficulty in insertion of uterine manipulator for laparoscopy or for performing satisfactory hysteroscopy or curettage (6) It spares trauma to the bladder while opening the abdomen.

Though not common, this is an important clinical sign as the incidence of such cases is going to increase because of a steady rise in the incidence of caesarean sections worldwide.

Reference

1. Sheth SS, Goyal, M. V.; Shah N. J. *Gynecologic Surgery*, 13, 143, 1997.