

Supracervical Hysterectomy

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To those surgeons promoting supracervical hysterectomy, its short term and long-term advantages over total hysterectomy are many and obvious. Some of these are based on published data, others are either simple "common sense" or anecdotal. In most patients undergoing hysterectomy for benign disease, the cervix is normal. That proves it is an unnecessary extension of surgery we perform at hysterectomy by removing the normal organ, namely the cervix. Not only unnecessary, but is attended with an increased risk of parametrial dissection, more blood loss, urinary or bowel injury and longer operative time and prolonged recovery (Johns, 1997)

1. Cervix is not part of the uterus :

Except for the close proximity, uterus and cervix are two entirely different organs by anatomy, histology, histochemistry and function. Hence uterine disease should not be treated by removal of the normal cervix.

2. The "Normal organ":

Normal organs rarely require removal. Why remove a normal cervix simply because it happens to be attached to the uterus ? in the majority of patients

undergoing hysterectomy, the cervix is not involved with the pathology leading to surgery. In these patients, cervix is a normal organ, and hence should not be removed.

3. Cervical cancer :

Historically, the cervix has been removed to prevent the subsequent development of cervical cancer. This practice, however, cannot be supported by published data. Stump cancers of 0.4%, reported in earlier series of supracervical hysterectomies have occurred within a short period after surgery, thereby proving that early cervical changes were pre-existing at the time of hysterectomy which were not properly evaluated by the screening techniques. Since the application of proper preoperative cervical screening and distraction of cervical epithelium by electrocautery the incidence of stump cancer has decreased to 0.1%. Currently reported vault cancer (carcinoma of the vagina) after hysterectomy is even higher (0.17%), but no one seriously suggests removal of the vagina during hysterectomy to avoid this risk. Since subjects undergoing total hysterectomy do not have any follow-up, vault cancer detection and treatment will be considerably delayed, unlike periodic cervical screening detecting premalignant lesions after supracervical hysterectomy.

4. Decreased infection :

Total hysterectomy requires surgical entry into the vaginal cavity. This exposes the peritoneal cavity to organisms indigenous to the vagina and potentially risky to the peritoneum. This contamination does not occur at supracervical hysterectomy, therefore the incidence of postoperative intraperitoneal infection should be negligible.

5. Uterine artery :

If the cervix is removed, the surgeon must control

the uterine artery as well as its branches supplying the cervix and upper vagina. Supracervical hysterectomy avoids these vessels and should be associated with less operative blood loss and morbidity.

6. Urinary tract injuries :

Because of the proximity to cervix and uterine artery, ureteral injury is more common if cervix is removed. In fact, the ureter most commonly is injured at the level of the uterine artery during total hysterectomy.

Leaving the cervix logically should negate this risk. Total hysterectomy requires the bladder to be dissected from the cervix and lower uterine segment. Supracervical hysterectomy does not require this dissection and hence should obviate the risk of bladder injury.

In our series there were 3 ureteric injuries and one bladder injury for the first 200 vaginal hysterectomies for nondescent uterus, majority of patients having enlarged uteri or adnexal pathologies. In the subsequent 800 operations there were no urinary tract injuries. Thus, the total incidence of urinary tract injury has been 0.4%, and there were no bowel injuries (Rajan, 1985). Sutton (1995) reviewed 1,172 LAVH and reported 0.5% incidence of urinary tract injuries. Garry and Reich (1993) reported 0.13% incidence of ureteric injuries and 0.9% incidence of bladder injuries among 3,189 LAVH. Johns (1997) reported 1.0% incidence of injuries to bladder, ureter or bowel in 1,369 patients undergoing LAVH or vaginal hysterectomy. Donnez et al (1997) while reporting on 500 laparoscopic supracervical hysterectomy have no incidence of bladder, ureter or bowel injuries.

7. Rectal injury :

Rectal injuries are possible in total hysterectomy, particularly when there are adhesions in the POD. Since supracervical hysterectomy does not require the junction of the rectum and upper vagina to be

incised there is no risk of rectal injury.

8. Surgical difficulty :

For most surgeons, particularly the beginners, the most difficult portion of total hysterectomy involves dissection of the parametrial pelvic cellular tissue and the transection of the cardinal uterosacral ligament complex. This dissection is the most morbid step in total hysterectomy in terms of haemorrhage and injury. The supracervical approach eliminates this difficult step and thus the attended haemorrhagic and traumatic morbidity.

9. Operative advantages :

Avoiding these tedious and potentially difficult steps should prove simplification of surgery and shorten operative time. Shorter operating time coupled with minimal morbidity and fewer complications should make supracervical hysterectomy more acceptable and cost-effective.

10. Bladder dysfunction :

The plexus of sympathetic and parasympathetic nerves supplying the bladder lies close to the cardinal uterosacral complex. While removing the cervix, this area may be damaged, resulting in bladder dysfunction. Moreover, compared to total hysterectomy Kilkku (1985) has reported lower incidence of urinary frequency and incontinence after supracervical hysterectomy.

11. Vault bleeding :

Secondary haemorrhage through the vault is one of the dreaded complications of total hysterectomy. This complication is unheard of in supracervical hysterectomy, and in general secondary haemorrhage for supracervical hysterectomy is the remotest of complication.

12. Rapid recovery :

Supracervical hysterectomy is attended with more comforts and more rapid recovery, and since the parametrial dissection and entry into the vaginal

cavity are avoided the patient can be discharged home with confidence on the same or next day.

13. Vault complications :

The usual postoperative complaint following total hysterectomy is vaginal discharge, bleeding/spotting and passing of suture material. These complications are due to vault granulation, prolapse of the fallopian tube and presence of suture material in the vault. Patients are free from these complaints, naturally, when they undergo supracervical hysterectomy.

14. Vault prolapse :

Removal of cervix in total hysterectomy damages or destroys supporting structures of the supravaginal cervix and the upper vagina, especially the uterosacral-cardinal ligament complex. This parametrial damage ultimately could lead to a great risk of vaginal vault prolapse, and is best avoided while performing supracervical hysterectomy.

15. Sexual function :

In the survey of Kilku in (1985) the sexual function, namely frequency and orgasm, after supracervical hysterectomy was greater than that after total hysterectomy. Moreover, supracervical hysterectomy often relieved dyspareunia in a greater percentage compared to total hysterectomy.

Discussion

It is well recognized that incidence of cancer cervix has been on the decline and significantly low. Hence communities where effective cervical screening is feasible supracervical hysterectomy has lot many benefits. Unlike conservative measures such as hormone therapy and endometrial ablation which also need regular cervical

screening, supracervical hysterectomy offers absolute cure. Unlike total hysterectomy, all the morbidities attended with parametrial dissection and opening of the vaginal vault are obviated.

If supracervical hysterectomy is popularized, vaginal hysterectomy (which involves removal of cervix) will become a less favoured surgery. By preferring supracervical approach there is a compulsion to accept abdominal approach. Since laparotomy is less preferred the choice can squarely fall on laparoscopic supracervical hysterectomy. Those who are not well trained in laparoscopic surgery could prefer minilap supracervical hysterectomy, which is quite safe, simple and less time taking. Enlarged uteri and those with difficulties may still require the conventional abdominal incision for supracervical hysterectomy.

References:

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