Evaluation of urinary fistula after Radical hysterectomy

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Abstract

Rate of lower urinary tract complications after radical hysterectomy has been reported with variable rates. It has been found that up to one half of patients will experience at least one urinary tract symptom that develops after radical hysterectomy. Various retrospective studies have examined lower urinary tract dysfunction and injuries as fistula after radical hysterectomy. Compication could be simple as a transient urinary dysfunction to severe as urinary fistula However before diagnosing severe complication of urinary fistula, we should do simple test as examination of urea and creatine level of client's serum, fluid and urine. These simple test can help to prove that it is not a severe complication as urinary fitula. Like our case though it looked like VVF in the post operative period, however it was daignosed to be just a transient problem after doing simple test as examination of urea and creatine level of client's serum, fluid and urine.

Key words:

Radical hysterectomy, urinary fistula, simple test , daignosis

Introduction

Clark performed the first radical hysterectomy for cervical cancer at Johns Hopkins Hospital in 1895. In 1898, Wertheim, a Viennese physician, developed the radical total hysterectomy with removal of the pelvic lymph nodes and the parametrium. In 1905, Wertheim reported the outcomes of his first 270 patients. The operative mortality rate was 18%, and the major morbidity rate was 31%. In 1901, Schauta described the radical vaginal hysterectomy and reported a lower operative mortality rate than the abdominal approach. In the late 20th century, radiation therapy became the favored approach because of the high mortality and morbidity of the surgical approach. In 1944, Meigs repopularized the surgical approach when he developed a modified Wertheim operation with removal of all pelvic nodes (the Wertheim-Clark plus Taussig operation). Meigs reported a survival rate of 75% for patients with stage I disease and demonstrated an operative mortality rate of 1% when these procedures were performed by a specially trained gynecologist. Throughout the remainder of the 20th century, various modifications have been made for this radical procedure, especially in light of improvements in the areas of anesthesia, intensive care, antibiotics, and blood product transfusion science. Finally, the concurrent decrease in the incidence of invasive cervical cancer, the most common rationale for this procedure, has declined over the past several decades and has led to more conservative procedures (i.e. conization for early-stage disease) or non-surgical modalities (i.e. radiotherapy).[1] ~~(1)~~
Rate of lower urinary tract complications after RH has been reported with variable rates. It has been found that up to one half of patients will experience at least one urinary tract symptom that develops after radical hysterectomy.[2,3] Various retrospective studies have examined lower urinary tract dysfunction and injuries as fistula after radical hysterectomy.[4,5]

Case report

A 46 year old nulligravida presented in gynaecolgy cancer screening clinic in T U Teaching Hospital with excessive per-vaginum discharge for 3 months, lower pain abdomen ~~2 months~~and post coital bleeding for 2 months each. On examination her general condition was fair except for 10 by 8 cms thyroid swelling in neck, which was mobile and non tender .Her per-speculum examination revealed eaten up on anterior lip of cervix and on vaginal examination cervix felt irregular and uterus was anteverted, mobile, non tender and bilateral fornixes were free and per rectum examination rectal mucosa free. Colposcopy guided punch biobsy was done which revealed adenocarcinoma. Then examination under Anethesia was done and staging was made Cancer Cervix I A2. Counseling done on 2 modalities of management that is Surgery and Radiotherapy, client opted for surgery. Her complete pre-op evaluation was done, including CT Scan and which revealed lymph nodes not enlarged and parametrium free. She underwent Type 3 Radical Hysterectomy. At peri-operative finding uterus was normal and bilateral tubes and ovaries were normal however left obturater Lymph node was enlarged to 2 by 1 cm, on cut section no growth in endometrial and endocervical canal. She was continued with catherization and abdominal drain was kept. Her intra-operative and post operative period was uneventful but on 8th postoperative day she complained of vaginal leaking. On vulval inspection vulva was wet and speculum examination revealed plenty of fluid on coughing but the vaginal fluid did not have the pungent smell of urine. The vaginal fluid and serum creatine was sent and the creatinine level of both serum and vaginal fluid was almost same value was and to reconfirm urea of urine and vaginal fluid was sent and urea of urine was ~~s times~~ many times higher ~~by~~ then that of vaginal fluid. So the patient was not told that she had fistula and 2 days later Intravenous Pylogram revealed normal and in meantime the abdominal drain the fluid was less then 50 ml and discharge from also

stopped. Her drain and catheter removed onh 14th pos operative day and was dischaged on 15th post operative day and referred for radiotherapy as lymph node was positive. Retrospectively our decision not to tell the patient the she had fistula was correct, as we have to con firm the diagnosis of severe complication as fistula before telling the client, .

Discussion

The introduction of cervical screening programs in the developed world has resulted in a reduction in the incidence of cervical cancer as well as in the earlier detection of the disease (6-8). Unfortunately in developing countries, advanced cervical cancer is still one of the most common cancers. Despite the fact that surgery and radiotherapy are equally effective for treatment of early cervical cancers, the latter is less preferable due to unexpected complications and long-term consequences

However as with any other surgery, careful preoperative risk assessment must be performed. there are some contraindications to radical hysterectomy that include patients who are medically not fit and those who refuse surgical treatment and a relative contraindication concerns the possible requirements for adjuvant radiotherapy and complications to the urinary tract (ie, stage IB2/IIA or intraoperative findings of locally advanced disease with overt parametrial involvement or grossly positive pelvic or para-aortic lymph nodes).

There is several transient post operative urinary dysfunction involving urinary storage and evacuation function are quite common following RH-6.Beside these transient post operative urinary dysfunction complication involving urinary tract system do occur after RH, Zaine etal reported 20% risk of post operative ureteric fistula and Ralph(9) reported only a. 4.4% risk of urinary fistula. These authors have reported intra-oprative urinary tract injuries of4.5% by Zaino et al(10) and 6.6 % by Ralfh etal. Intra operative and post operative complications reported are variable, but when complications occur they might be just mild complications which resolves on its own with relief to both the client and operating team. Like our case though it looked like fistula, however it was just a transient problem and its always better we exclude major problem as urinary fistula before diagnosing major complications with simple test as examination of urea and creatinine level of client's serum , fluid and urine- Telend(11)

Conclusions

While doing RH intra-operative and post operative urinary complications do occur with variable rate. Compication could be simple as a transient urinary dysfunction to severe as urinary fistula However before diagnosing severe complication of urinary fistula, we should do simple test which can help to prove that it is not a severe complication as urinary fitula.

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