Case Study

The surgical challenges of endometriosis at Butare University teaching hospital, Rwanda: Case report

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Abstract

Endometriosis is one of the most common disorders encountered in surgical gynaecology. Colonic and rectal endometriosis is relatively uncommon but has been documented in many parts of the world. The laparoscopic technique, the planning of the surgical intervention, the extent of information provided to patients and the interdisciplinary coordination make it a challenging intervention. Complete resection of all visible foci of disease offers the best control of symptoms. However, the possibility of achieving this goal is limited by the difficulty of detecting all foci and the risks associated with radical surgical strategies. A detailed history of individual symptoms, adequate diagnostics and special surgical skills are indispensable for diagnosing endometriosis and for preoperative planning and surgery.

Keywords

Endometriosis
Colonoscopy and tissue biopsy

Introduction

A 30 year old female, B.N, presented for surgical consultation in January 2012, with a three months history of rectal bleeding and constipation. She had experienced these symptoms for more than one year, and had first relied upon herbal treatment. There were no relieving and aggravating factors. Clinical assessment by digital rectal examination revealed a large mass on the anterior wall of the rectum, 4cm from the anal verge, and a small fixed mass in the vagina. Colonoscopy and tissue biopsy were performed, confirming the presence of the rectal mass at 4 cm, and covering more than half of the circumference of the rectum. No synchronous masses were reported. The abdominal ultrasound and chest X-ray findings were not remarkable. Biopsies were analyzed by experienced pathologists. The histological result was non-specific chronic inflammation. Three weeks later, the patient presented to the emergency unit with features of intestinal sub-occlusion as a result of an increase in the size of the rectal mass. After rigorous counseling, a diverting colostomy was performed during an
exploratory laparotomy. There were no additional masses noted in the abdomen. The rectal mass was not palpable abdominally.

**The Challenges**

**Diagnostic challenges**

Four tissue biopsies were performed on different occasions. Three of these were performed during examination under anesthesia, each performed by different surgeons. Each surgeon had a different opinion about the mass, but collectively, plans to excise it were considered risky and difficult. After getting three unsatisfactory histology results, compared with the clinical picture which was largely in line with malignancy, a CT scan of the pelvis was performed. It suggested that the mass was malignant, with local-regional spread, staged as T4N3M1; by this time the mass had spread to the posterior vaginal wall and the posterior vaginal fornix. It was at this time that the 4th biopsy was performed during another examination under general anesthesia, and taken to Boston, USA, by a visiting colleague. Eventually the diagnosis turned out to be endometriosis.

**Management challenges**

With this benign mass almost filling the rectum at only 4cm from the anal verge, and involving the posterior wall of the vagina, the management options were not easily feasible. Excising it was not seen as the best option by most of us, given its location and extent.

**Gynecologists’ view**

Two senior gynecologists reviewed her case and suggested that this was a tumor that occasionally manifests extra-uterine, the intestinal involvement occurring rarely. They suggested that management by hormonal treatment was the best option for her. It was agreed that Danazol was superior to the locally available progestins. It was, however, not locally available and too expensive for the patient. So the only available options for her were the oral contraceptive pills and the depo-provera injection. Both of these were used simultaneously.

The hormonal treatment was given for several weeks without improvement, and it was abandoned. They argued that oophrectomy and hysterectomy would not be helpful to her as regards this condition. And in addition, this lady had hopes of having a reproductive life.

**Social challenges for the patient**

Having a prolonged colostomy was so stressful for her, as she had been told it was temporary. She had experienced several episodes of depression. The colostomy, the fact that she had no children, and was endlessly in hospital, contributed to the breaking of her marriage. She experienced serious financial and social challenges, and developed suicidal tendencies, for which serious counselling sessions were undertaken.

**Operation**

Following a morbidity and mortality meeting in which different clinicians gave their opinions about the management options best for the patient, it was finally agreed that she undergoes bilateral oophrectomy and hysterectomy, in order to promote regression of the mass. This operation was carried out without complication.
A few questions were asked

If the hormonal treatment with Danazol (synthetic testosterone) had been used, would the prognosis have been better? It is considered to be more effective than the contraceptives used in this case. What should have been done to have early detection and resection? After this operation, how soon should the mass be expected to regress in order to possibly consider colostomy closure? During a recent review of the patient, it was found that the mass had not changed.

Literature review

Colonic and rectal endometriosis is relatively uncommon but has been documented in many parts of the world. In a study by Graham B et al in 1988, at Ferguson Clinic, Michigan (USA), 32 patients with rectal endometriosis were treated and studied. 9 of them presented with rectal masses, two of whom had bowel obstruction, while 2 presented with pelvic spasms. Out of 11 patients treated with hormones, only 4 showed improvement. The 7 who were specifically on oral contraceptive pills did not show any improvement. The rest of the patients in the study underwent surgical treatment. Only two of this latter category did not improve, and it was thought that it was because at surgery, they had had only hysterectomy and oophorectomy. Trehan, a specialist in endometriosis management with over 20 years’ experience suggests that hysterectomy is not a solution in the management of endometriosis. His main-stay of treatment is laparoscopic resection of the endometrial lesions, including those that are extra-uterine.

Other sources suggest that while surgery is effective, recurrence rates even after successful surgery for endometriosis is rated at 40%. Many clinicians recommend oral medication of danazole or contraceptives after surgery. Endometriosis and primary infertility combined tend to increase the risk for epithelial ovarian cancer. Oral contraceptive pills are thought to be preventive in this situation. (Mellisa et al, 2013)

Follow up of the patient

Following hysterectomy and bilateral oophorectomy, subsequent follow-up of the patient has been disappointing both to the doctors and the patient. The last time this patient came to the surgical out-patient clinic for review was in December 2014. The size of the tumor was found to be more or less the same as it was at the time of surgery. It is not predictable how long remarkable regression of the tumor will take, if at all.

References

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