Case Report

Le Fort Colpocleisis: re-visited and re-proposed

Mark Formosa

Introduction
A case of an elderly woman suffering from severe genital prolapse is presented. This was so severe that her daily everyday activities became significantly impeded. This was a significant limitation to an individual who could otherwise manage independently of family or institutional help.

Major surgical procedures (vaginal hysterectomy) are associated with significant risks in these elderly and frail women. Utero-vaginal prolapse is never a life-threatening condition and the surgeon is faced with the dilemma of whether to recommend this procedure, with this risk, to restore her mobility.

Case summary
Mrs S is a 93 year old widow with a long history of uterine prolapse which had been treated with a vaginal ring pessary for well over 10 years.

Over the last 18 months the prolapse became so severe that the ring did not provide any further relief. She also complained of urinary incontinence and dysuria.

Mrs. S also suffered from diabetes mellitus, hypertension, chronic renal impairment and gave a history of deep vein thrombosis during pregnancy. She had 7 children and one miscarriage. Her surgical history included two curettages one because of a miscarriage and another due to menorrhagia.

She also gave a strong family history of ischaemic heart disease (both parents and a brother had died due to this).

She was well controlled on oral hypoglycaemic and antihypertensive drugs. Her general state of health was satisfactory and was fully mobile until she developed the procidentia.

On examination she was found to have a complete procidentia, in spite of the ring pessary and required urgent admission, and catheterisation.

Once it became clear that the ring pessary was no longer going to help with the patients’ prolapse surgery became necessary.

Her age and medical condition suggested that a Le Fort’s Colpocleisis would be the best option for this particular patient since the objective here was to restore her comfort in order to be again fully mobile. A rectangular incision (Figure 1) was made on the anterior and posterior vaginal wall, freeing the mucosa. Whilst pushing the cervix back, the congruent edges of the incised area were approximated and sutured using interrupted polyglactin 1 sutures, and the denuded areas of the anterior and posterior vaginal walls were also approximated with a second layer of interrupted sutures. Closure of the original vaginal incision was finally performed, leaving two mucosal lined tunnels on either side. There were no peri- or post-operative complications and the patient was discharged home after 5 days.

One year later Mrs. S is asymptomatic, not complaining of any discomfort, incontinence or dysuria and was back to her daily routine.

Discussion
Pelvic organ prolapse is a common condition which develops in up to 50% of females, “the risk increasing with age”. It is asymptomatic in 20% of these women. The pelvic floor supports abdominal and pelvic viscera. It is made up of muscle (levator ani) and fascia (enveloping the levator ani and fixing them in the midline and to bone). As the pelvic floor gets weaker, it is unable to keep the structures in the anatomical position.

The causes of pelvic floor dysfunction are shown in table 1. Pelvic organ prolapse causes significant chronic discomfort for the patient which with time becomes an object of distress. This will vary with the severity of the prolapse, the more severe the prolapse, the greater will be the difficulty encountered.

The patient will initially complain of a dragging sensation in the perineum which is obviously relieved on lying down.

As the prolapse increases in severity the tissues prolapsing out of the vaginal orifice will result in a mechanical impediment to walking.

This is the most important complication of a prolapse. It will interfere directly with the most important feature distinguishing an independent elderly patient from one who

<table>
<thead>
<tr>
<th>Table1: Factors affecting pelvic support (from Ref 2)</th>
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<tr>
<td>1. Decrease muscle tone with increasing age</td>
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<td>2. Injury during childbirth</td>
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<td>3. Neurological conditions causing inappropriate muscle relaxation (e.g. Multiple Sclerosis)</td>
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<td>4. Congenital fascial factors eg Ehlers-Danlos syndrome</td>
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<td>5. Fascial stiffness with increasing age</td>
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<tr>
<td>6. Increased intra-abdominal pressure (obesity, coughing, straining)</td>
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is not: free mobility. Other common symptoms of prolapse are both urinary and defaecation problems, problems with vaginal discharge and bleeding.

There may also be necrotic ulceration of neglected procidentias with infection but this is rare.

The operation known as Colpocleisis has been regarded as one of historical interest for a long period of time now. The operation was first performed by Neugebauer in 1867 but he did not publish it until 1881. In 1877 Le Fort, ignorant of Neugebauer’s work published a report on his experience. Already at that time the authors contended that the operation provided a maximum of symptomatic relief through a minimum of surgical procedure in the poor-risk surgical candidate. This fact is emphasised in the spate of very recent reports from the USA.

In the latest study the authors sought to assess the quality of life, morbidity and post-operative satisfaction of 152 patients. Their conclusion was that Colpocleisis was effective in resolving prolapse and pelvic symptoms and was associated with high patient satisfaction.

The key fact to highlight was that the mean age of these patients was 79 years. These results were reported a year ago by another group from the USA where a follow-up questionnaire patients were asked to address urinary and colorectal symptoms, restoration of physical activity and normal anatomy, and self-image. Again the mean age of the patients was 75.4 years and the conclusion was that Colpocleisis results in improved quality of life and substantial goal attainment with a low proportion of regret.

The increasing population of elderly women in our society will of necessity result in an increase in the number of elderly women seeking help for pelvic organ prolapse.

The age factor is the principal point on which the argument in favour of retaining colpocleisis rests. A study on morbidity and mortality rates of elective gynaecologic surgery in the elderly woman concludes that although age alone was not a contra-indication to elective surgery, there may be increased risks for geriatric women. This study was performed on 54 women between 70 and 85 years. In contrast a literature review from France proposed a 1% mortality rate as acceptable in women over 70 years using vaginal hysterectomy, colpo-perineorrhaphy and sacrospinous fixation.

Given that prolapse itself will never lead to the death of a patient I cannot agree with this argument. The most common method of managing these elderly women is by inserting a vaginal ring pessary. This is successful in a large proportion of patients but not all as the case in point illustrates.

Also pessaries can be associated with significant complications including vaginal fistulae especially if neglected. More commonly they cause a persistent discharge which may become blood stained if superficial ulceration of the vaginal skin occurs as it often does.

The significant advantages of a Le Fort Colpocleisis are that it is the simplest and quickest of all procedures which can be used to correct prolapse. It can be performed using only light anaesthesia and will cause only minimal blood loss.

The most common objections to a colpocleisis are that bleeding from the genital tract due to a carcinoma cannot be investigated properly, the risk of a pyometra and of course, the patient has to be leading a celibate life as intra-vaginal intercourse is impossible after this operation.

Also there may be the possible development of stress incontinence due to alteration of the urethrovaginal angle and any existing enterocoele is not treated by this operation.

Conclusion

In spite of the potential problems associated with this procedure I propose that the operation of colpocleisis is a skill which needs to be retained. Prolapse and incontinence may represent the most important gynaecological challenge of our ageing population and we should be able to provide all the possible treatment options.

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References