

**Original Article****Use of Vaginal Speculums in Lower Rectal and Anal Conditions.****M. Mchembe, C.M.A. Yongolo.***Correspondences to:* Dr Mchembe MD, Lecturer, Department of Surgery Muhimbili University College of Health Sciences OR Dr.Yongolo Email: syongolo@muchs.ac.tz

**Background:** Ano-rectal conditions are one of the common diseases attended by General practitioners and Surgeons at the outpatient clinics and in-patients. Visual inspection of the anal canal and rectum using different instruments such as anoscope and sigmoidoscope which require light sources is essential to assess the site, the extent of the lesion as well as to take biopsy or provide surgical treatment to small or minor lesions. This paper describes our experience with use of common vaginal vaginal speculums (Graves and Sim's speculum) as an alternative to anoscopes (which require light sources and are unavailable in other centers).

**Methods:** Adult patients with different anal complaints were seen, investigated and treated by the authors using Graves, Pederson and or Sims vaginal speculum in two hospitals- Muhimbili national and Tumaini hospitals in Dar-es-Salaam July 2003 and December 2004.

**Results:** A total of 27 adult consecutive patients with different types of anal and lower rectal conditions were managed using the vaginal speculums between. The age range of the patients was between 10 – ≥ 51years. There were 19 males and 8 females. Most of them (70.3%) had fissure and fistula- in – anal and haemorrhoids. The instruments provided excellent results both in the diagnosis and treatment of such conditions.

**Conclusion:** These speculums can be used as alternatives in places where the recommended instruments are not available.

**Introduction:**

Ano-rectal conditions both benign and malignancies are one of the common diseases attended by General practitioners and Surgeons at the outpatient clinics and in-patients. Among the common anal and lower rectal benign conditions are; Proctitis, Peri-anal abscesses, Fissure -in- anal,

Fistula-in-anal, haemorrhoids and non-specific perianal skin allergies<sup>1</sup>. Ano-rectal malignancies (such as adeno-carcinoma of the rectum and squamous carcinoma of the anal canal) can also be seen in patients necessitating admission at the district, regional and referral hospitals. During physical examination inspection may reveal haemorrhoids, fistula in ano, skin tags, dermatological problems (including pruritic changes), abscess, fistula, scar, and deformity. Pain upon spreading the buttocks may indicate the presence of an anal fissure. Straining may provide information of the presence of rectal prolapse, hypertrophied anal papilla, or, most commonly, haemorrhoids may protrude. Careful Digital rectal examination and examination of the surrounding structures is mandatory. Visual inspection of the anal canal and rectum with the help of different instruments (anoscope and

sigmoidoscope) is essential to assess the site, the extent of the lesion as well as to take biopsy or provide treatment (surgical) to small or minor lesions<sup>1</sup>. Different types of anoscopes and sigmoidoscopes (flexible and rigid) are available for the inspection of anal canal and rectum. An alternative to anoscopes (which require a light source and are unavailable in other centers) is to use the most common vaginal speculum (Graves' and Sim's speculum). These are **available** in all centers easy to use and clean, and do not require special light source instead they only require normal operating theatre lights or torch<sup>2,3</sup>.

**Patients and methods**

Adult patients, both males and females with different anal complaints were seen, investigated and treated by the authors using Graves, Pederson and or Sims vaginal speculum in two hospitals- Muhimbili national and Tumaini hospitals in Dar-es-Salaam, Tanzania. The cases were managed from July 2003 to December 2004, a one year and six months period, formed the basis of this study. The materials needed were as follows:

- One Graves or Pederson or Sims vaginal speculum

- K-Y jelly Lubricant
- Light; operating theatre lights or torch (flashlight)
- Anaesthesia; general or spinal
- Biopsy forceps or probe.
- Other equipments for specific diagnosis or treatment.

A careful pre-operative preparation and consultation with physicians and

anaesthesiologists was done where necessary for patients who were diabetic or hypertensive or both. Patients were given enema (saline or soap or enemax or glycerin or dulcolax suppositories) in the morning of the day of operation. Under general or spinal anesthesia, patient was placed in lithotomy position. The perineum was cleaned using dettol or savlon antiseptic solutions and draped with sterile drapes.

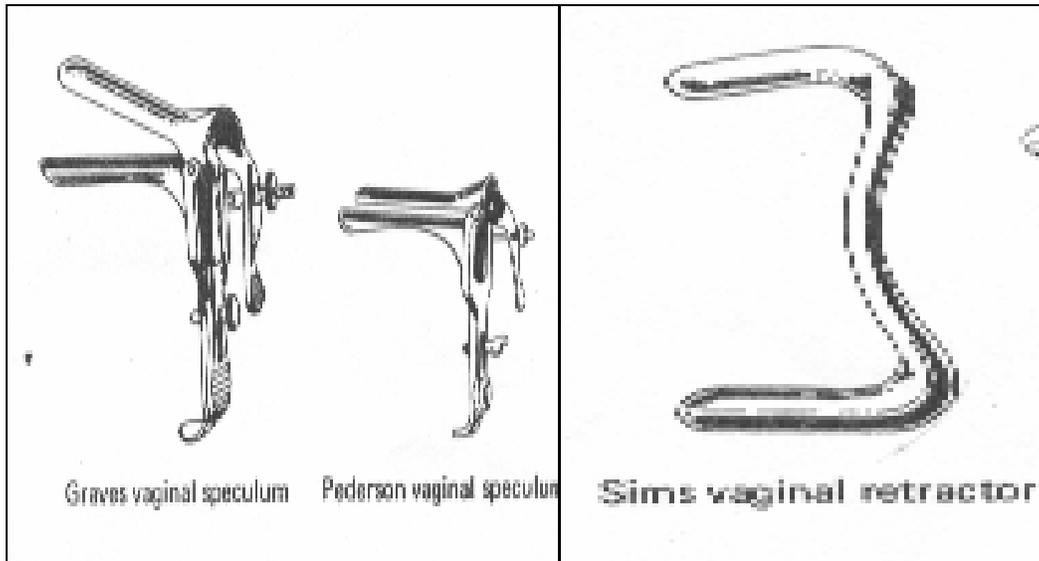


Fig. 1. Vaginal speculums used during the study.

### Operative Technique.

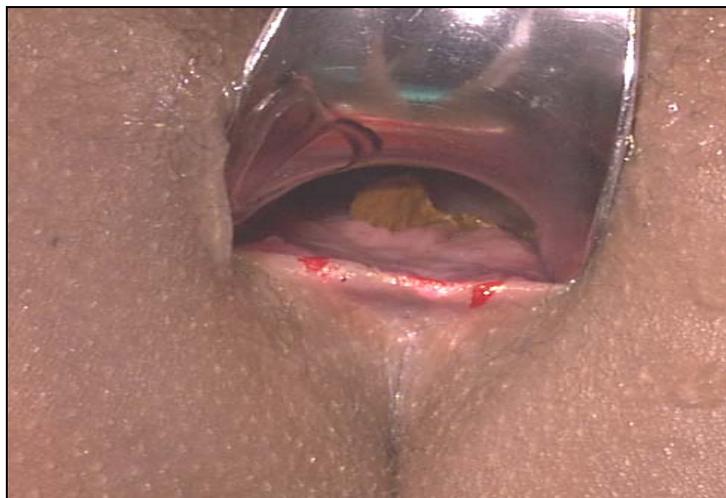
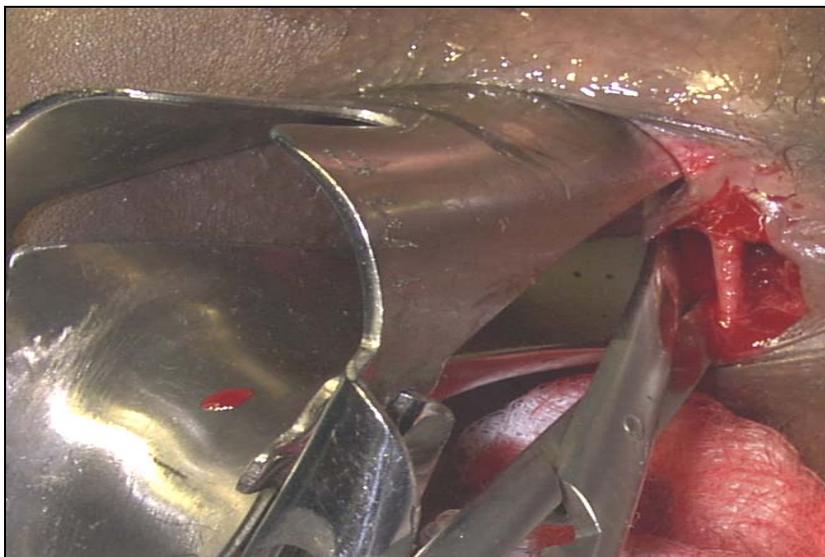


Fig. 2. The speculum is lubricated with K-Y jelly and introduced into the anal canal, with gentle retraction on one side of the anal canal or by gentle opening of the speculum blades (using Graves, Pederson or Cusco) the anal canal and lower rectal region is well visualized with the aid of theatre lights the diagnosis and treatment of conditions like fissure or fistula -in- anal, haemorrhoids and tumours can be done without any difficulties.



**Fig. 3.** The left lateral subcutaneous internal sphincterotomy.

**Results**

**Table 1.** Age and sex distribution of the patients.

Age(yrs)	Sex		Number of patients
	male	female	
10-20	1		1
21-30	3	2	5
31-40	8	4	12
41-50	4	1	5
≥ 51	3	1	4
<b>Total</b>	<b>19</b>	<b>8</b>	<b>27</b>

**Table 2.** Conditions diagnosed/treated using vaginal speculum:

Conditions	Number Of Patients	%
1. Fistula-in-ano	5	18.5
2. Fissure-in-ano	7	25.9
3. Haemorrhoids	7	25.9
4. Perianal abscess	3	11.1
5. Tumours	1	3.7
6. Anal injury and Pilonidal sinus	4	14.8
<b>Total</b>	<b>27</b>	

Twenty seven consecutive patients were seen between July 2003 and December 2004. Table 1 shows their age/sex distribution. The majority of the patents (74%) were males. The commonest conditions treated were haemorrhoids and fissure in ani, which represented 25.9% of the patients each. Only one malignant condition was seen during the period of study. Fistula in ano and perineal abscesses were also diagnosed and treated (Table 2).

The exposure of the anal canal and lower rectum was excellent.

### Discussion:

The study showed that, vaginal speculums are also useful alternative instruments where recommended instruments are not available for diagnosis and or treatment of anal and lower rectal conditions. The advantage of using these instruments described herein includes; they are simple to use, widely available even at health center level, needs no special light sources and they are easy to clean or sterilize and easy maintenance. A carefully taken history may indicate or at least suggest the diagnosis. The common symptoms indicating anal or rectal pathology includes; bleeding during/after defaecation, anorectal pain, anal (perianal) mass, rectal discharge, faecal incontinence, a sense of incomplete emptying and change in bowel habits.

Developing countries like Tanzania often lack these expensive and sometimes-sophisticated anosopes and sigmoidoscopes at different health care levels and therefore, it becomes difficult to diagnose and treat peri-anal, anal and lower-rectal conditions. Hence, it costs the patients, families and the Government to refer these

patients to other centers, regional hospitals and referral hospitals for diagnosis and treatment of lower rectal and anal conditions which could be performed easily at these different levels of the referral system.

We believe that there is no reason for referring patients to referral hospitals for diagnosis and or treatment of the mentioned conditions simply because of shortage/lack of proctoscope or Parks anal retractors. This modification of diagnostic and treatment facility if adopted will be found to achieve satisfactory results for the diagnosis of lower-rectal, anal canal and peri-anal conditions. As a result of its simplicity, applicability and good results, our experience is hereby recorded in order to advocate wider use of this technique for these common conditions from the health center level to the district, regions and therefore reducing the number of patients un-necessarily referred to referral centers.

If these instruments are used appropriately they will minimize inconveniences to the patients and the referral hospitals at large limiting referrals to those with upper rectal conditions. The rarity of the tumors in this series of patients suggests the rarity of tumors in this site and however the number of patients is small to draw any conclusion

### References

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