CLINICAL OUTCOME OF MANUAL DILATATION OF THE ANUS (MDA), FOR ANAL FISSURE AT MULAGO HOSPITAL.

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF A MASTER OF MEDICINE DEGREE IN SURGERY OF MAKERERE UNIVERSITY

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Clinical Outcome of Manual Dilatation of the Anus (MDA) for anal fissure in MULAGO Hospital.

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1. DECLARATION

I, Olupot Robert, declare that this is my original work. The contributions from others used in the preparation of this work are appreciated and duly acknowledged.

This study in full or otherwise has not been submitted for an academic award in any other university and has not been published in any scientific journal.

Signed: .................................................................

Date: .................................................................

This dissertation has been submitted for examination with the approval of the following supervisors:

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Signed: .................................................................

Date: .................................................................

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II. DEDICATION

To my late parents John Frederick Okorio and Janet Iryaku for having laid down the foundation of my academic pursuits.

To my lecturers for imparting the knowledge and skills.

To Gorreti my dear wife, for standing by me throughout the course and preparation of this dissertation.

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Last but not least, to Dr John Opolot a senior colleague, for his inspiration and never ending guidance.
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# TABLE OF CONTENTS

I. DECLARATION........................................................................................................... i
II. DEDICATION......................................................................................................... ii
III. ACKNOWLEDGEMENT......................................................................................... iii
V. LIST OF TABLES AND FIGURES........................................................................... v
VI. LIST OF APPENDICES.......................................................................................... v
VII. LIST OF ABBREVIATIONS.................................................................................... vi
VIII. ABSTRACT........................................................................................................... viii

CHAPTER ONE........................................................................................................... 1
1.0 INTRODUCTION.................................................................................................. 1
1.1 THEORETICAL BACKGROUND............................................................................ 3

CHAPTER TWO........................................................................................................... 12
2.0 REVIEW OF LITERATURE................................................................................... 12
2.1 STATEMENT OF THE RESEARCH PROBLEM................................................... 16
2.2 RESEARCH QUESTIONS....................................................................................... 17
2.3 PURPOSE OF THE STUDY.................................................................................. 17
2.4 JUSTIFICATION.................................................................................................... 17
2.5 OBJECTIVES OF THE STUDY.............................................................................. 18

CHAPTER THREE..................................................................................................... 19
3.0 PATIENTS AND METHODS................................................................................... 19
3.1 STUDY DESIGN AND STUDY SETTING............................................................... 19
3.2 STUDY PARTICIPANTS/STUDY POPULATION.................................................. 19
3.2 INCLUSION CRITERIA........................................................................................... 20
3.4 EXCLUSION CRITERIA......................................................................................... 20
3.5 SAMPLE SIZE CALCULATION............................................................................ 20
3.6 PROCEDURES...................................................................................................... 22
3.7 DATA COLLECTION.............................................................................................. 25
3.8 STUDY VARIABLES............................................................................................. 25
3.9 DATA MANAGEMENT AND ANALYSIS............................................................... 26
3.10 QUALITY CONTROL........................................................................................... 26
3.11 DATA DISSEMINATION....................................................................................... 26
3.12 ETHICAL CONSIDERATIONS............................................................................. 27
3.13 LIMITATIONS OF STUDY................................................................................ 27

4.0 CHAPTER FOUR.................................................................................................. 28
RESULTS..................................................................................................................... 28

5.0 CHAPTER FIVE - DISCUSSION OF RESULTS................................................... 41
CONCLUSION........................................................................................................... 45
RECOMMENDATIONS............................................................................................... 46
REFERENCES............................................................................................................ 47
APPENDICES............................................................................................................. 49
V. LIST OF TABLES AND FIGURES

Table 1: Age distribution of the study subjects .............................................. 28
Table 2: Marital status of study population .................................................. 29
Table 3: Distribution of study population by occupation ................................. 29
Table 4: Distribution of presenting symptoms .............................................. 30
Table 5: Distribution of Pain duration in weeks in the study population ............ 30
Table 6: Previous Conservative Treatments given .......................................... 31
Table 8: Distribution of fissure location number and sex cross tabulation ....... 33
Table 9: Sex Serostatus cross tabulation ..................................................... 34
Table 10: Fissure number serostatus cross tabulation ................................... 34
Table 11: Follow up status ........................................................................ 35
Table 12: Patient own assessment of overall outcome ..................................... 40

Figure 1 Previous treatment ....................................................................... 31
Figure 2: Previous medical treatment ......................................................... 32
Figure 3: Anorectal evaluation .................................................................. 33
Figure 4: Serostatus and sex distribution ................................................... 34
Figure 5: Outcome on Follow up ............................................................... 39
Figure 6: Overall Results ......................................................................... 40

VI: LIST OF APPENDICES

Appendix A - Study period
Appendix B - Budget estimate
Appendix C – Questionnaire
Appendix D - Consent forms
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired ImmunoDeficiency Syndrome</td>
</tr>
<tr>
<td>CAF</td>
<td>Chronic Anal Fissure</td>
</tr>
<tr>
<td>CRC</td>
<td>Colorectal Clinic</td>
</tr>
<tr>
<td>DRE</td>
<td>Digital Rectal Examination</td>
</tr>
<tr>
<td>EAS</td>
<td>External Anal Sphincter</td>
</tr>
<tr>
<td>EUA</td>
<td>Examination Under Anaesthesia</td>
</tr>
<tr>
<td>GTN</td>
<td>Glyceryl Trinitrate</td>
</tr>
<tr>
<td>HIV</td>
<td>Human ImmunoDeficiency virus</td>
</tr>
<tr>
<td>IAS</td>
<td>Internal Anal sphincter</td>
</tr>
<tr>
<td>LIS</td>
<td>Lateral Internal Sphincterotomy</td>
</tr>
<tr>
<td>MAD</td>
<td>Maximal Anal Dilatation</td>
</tr>
<tr>
<td>MDA</td>
<td>Manual Dilatation of Anus</td>
</tr>
<tr>
<td>MRP</td>
<td>Maximal Resting Pressure</td>
</tr>
</tbody>
</table>
OPERATIONAL DEFINITIONS
AIDS HIV Infected individual with CD4 count <200 per microlitre

Anal Verge External orifice or distal boundary of anal canal

Anoderm Squamous lining of the anal canal between the dentate line and the anal verge

Complication is a morbid process or an undesirable outcome following an operative intervention.

Dyschezia is fear of having a bowel movement

External Anal Sphincter (EAS) is a complex of skeletal muscle ring arranged around the anal canal outside the internal anal sphincter.

Failed medical treatment: No response or partial response to non operative treatment in 8 weeks

HIV Human immunodeficiency virus causing the Acquired Immunodeficiency Syndrome

Internal Anal Sphincter (IAS): A downward thickened extension of the circular smooth muscle fibres of the rectum.

Maximal anal dilatation: Lords original eight fingers dilatation a rather more aggressive technique than the gentle Goringher method four finger stretch.

Partial incontinence uncontrolled passage of flatus and or mucus leak per anus without the patients knowledge or voluntary contraction

Good Result No symptoms volunteered by the patient or elicited by direct questioning.

No Fissure present on examination.

Satisfactory Result Marked improvement in symptoms although there may be some symptoms volunteered or elicited by direct questioning. No fissure found on Examination

Poor Result No improvement in preoperative symptoms and/ or the presence of other symptoms sufficiently severe to make the patient feel no better as a result of treatment.

Successful treatment Fissure healing with a scar 3-4 weeks after treatment translated into relief of symptoms (resolution of post defaecation anal pain and constipation).

Surgical sphincterotomy is a controlled surgical division of the internal sphincter fibres.

Treatment Failure Unhealed fissure after 3-4 weeks duration following treatment or persistence of symptoms consistent with anal fissure.

True Incontinence Uncontrolled passage of faeces per anus without the patient’s knowledge or without adequate voluntary contraction
VIII: ABSTRACT

Background

The modern treatment of chronic anal fissure is aimed at reducing the resting anal pressure. This can be achieved either by a conservative approach as the first line of clinical management or surgery, if the conservative approach is unsuccessful. Manual Dilatation of the Anus (MDA) has been the mainstay of treatment for this condition for the last 160 years. It has its proponents and critics.

To date there has been a variation in practice with some authorities still practicing MDA and others preferring Lateral Internal Sphincterotomy (LIS) as the treatment of choice.

Both surgical options mechanically relax the internal anal sphincter, reduce the resting anal tone, improve or restore perfusion in the anoderm resulting into healing. A scientific analysis of manual anal dilatation however has not been made in this population.

The aim of this prospective descriptive study was to determine the outcome of standardized gentle MDA in the management of chronic fissure in this setting, and to identify the complications and the overall patient satisfaction as regards the final result.

Methods

Data was prospectively collected from patients aged between 18-61 years. Recruitment, clinical evaluation and HIV screening were done and a surgical intervention (MDA) offered. Recruitment was done concurrently with follow up lasting four weeks. Postoperative status was assessed at weekly intervals for complications or improvement.

Symptomatic assessment and overall patient satisfaction was then assessed on a scale at the end of the follow up period.
Results

A total of forty eight (48) patients were recruited and underwent surgery, three were lost to follow up and forty five (45) were followed up. The results if 45 patients are presented. The male to female ratio was 1:2.5

The mean duration of symptoms was 30 weeks and ranged between 6-60 weeks.

Over 80% of the patients had failed to improve on previous conservative therapy prior to admission.

MDA completely relieved symptoms in the majority of subjects (84%) with complete resolution of symptoms within the second and third week.

No case of incontinence featured as a reason for poor result in this series of patients.

The poor result was attributed to only one case that had transient disturbance of continence in the first week of follow up.

Six (6 %) of the patients did not show improvement and this was attributed to infection, progression to ulcer and mucosal prolapse.

Overall the results of MDA were good in sixty eight (68.9%), satisfactory in 20% and poor in 11.1%.

Conclusion

In view of the improvement observed and minimal cases of complications this study demonstrates a success rate of over 80%,

I would still recommend MDA in our situation as a useful mode of treatment for chronic anal fissure since it is associated with minimal postoperative complications.

A positive HIV status should not be a contraindication to MDA for as long as it is done gently with standard four fingers for four minutes.