

AIN SHAMS UNIVERSITY
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DIFFERENT METHODS OF TREATMENT OF HAEMORRHOIDS

WITH SPECIAL REFERENCE TO
CRYOHAEMORROIDECTOMY

AN ESSAY
SUBMITTED FOR PARTIAL FULFILLMENT
OF MASTER DEGREE IN
GENERAL SURGERY

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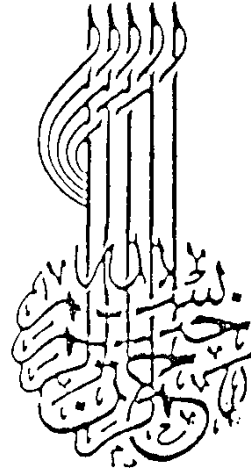
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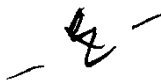
TO :

My Father ,

Mother

and the Memory of My Grandfather KALAM .

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CONTENTS

1- HISTORICAL REVIEW	1
2- ANATOMY OF THE ANAL CANAL	12
3- DIFFERENT METHODS FOR TREATING HAEMORRHOIDS .	
* Introduction	37
I- Conservative Treatment	41
A. Sclerotherapy	41
B. Rubber band ligation	53
C. Cryohaemorrhoidectomy	65
D. Anal dilatation	66
II- Operative treatment	79
A. Dissection _ligature operation	79
* Modifications of dissection _ ligature operation.	
- Closed Haemorrhoidectomy	100
- Sutureless Haemorrhoidectomy	103
- Submucous resection of haemorrhoids	107
- Pile suture	110
- Anorectal bandotomy and haemorrhoid ligation	114
B. Clamp and cautery operation	119
4- MANAGMENT OF COMPLICATED HAEMORRHOIDS .	
" Thrombosed or Strangulated Piles "	124
5- CRYOSURGERY AND HAEMORRHOIDS	134
I- Review of litrature	136
II- Indications	144
III- Technique of Cryohaemorrhoidectomy	149
IV- Complications	158
6- CONCLUSION	167
7- SUMMARY	169
8- REFERENCES	173
9- ARABIC SUMMARY	---

HISTORICAL REVIEW

Egyptian Surgery :

The oldest scientific document known is considered by most historians to be the Smith Papyrus . discovered in 1862 by the Egyptologist Edwin Smith , and translated into English in 1930 by J. H. Breasted .

Although this papyrus , originally written c . 3000 B. C. lists physical findings , diagnosis and treatment of some anal diseases.

The Chester Beatty papyrus lists numerous remedies ; topical , local and systemic for most known diseases of the anus but no surgical treatment was defined .

Indian Surgery : (c. 400 to 1550 B. C.)

Susruta described and outlined treatment for piles , anal fistula and rectal prolapse.

Piles were treated first by the application of caustics and if these were not effective , by horsehair ligature.

Arabic surgery :

Arabic physicanains preferred the cautery to the knife but this prference may not have issued from blood phobia as frequently claimed .

It was more likely the result of the desire to preserve blood , because the extreme heat in most Arabic countries causes dehydration , and small loss of blood could be fatal .

The finest compendium of Arabic surgery that has been preserved is that of Paul of Aegina (c. 625 to 690 . B. C.). In Pual's work there are , in addition , accounts of the surgical excision and cauterization of heamorrhoids as well as a discription of treatment of anal fistula .

It is apparent from these discription that Pual had considerable experience with anal surgery and recognized the necessity of keeping sphincter intact .

Paul's method of managing haemorrhoids is of interest .

"The existence of heamorrhoids is rendered manifest to us by the discharge of them . Before proceeding to the operation we must

use frequent clysters with a view of evacuating at the same time, the content of the intestine and by irritating the anus , rendering it more disposed to erosion and protrusion of the gut . Having therefore , laid the patient on his back in a clear light ,if we are to use a ligature , we pass a very thick thread round the lips , and secure each of the haemorrhoids with a ligure . After the application of the ligature using a compress that has been dipped in oil , and a bandage adapted to the anus .We order the patient to remain quietsometimes with the forceps used for operation on the uvula he cuts them off with the scalpel.

... thus by filling the cavity of the ulcerated called staphylocaustes , with caustic medicine have burnt heamorroids like a scirrhus uvula "

Salernan and Prenaissance Surgery : (c. A. D 1100 to 1350)

Theodoric also recognized the difference between internal and external heamorroids and advised surgery only after a variety of medical regimens ,his treament was to prolaps the haemorrhoids and to exise them to their base which was cauterised

Although he did not list the complications , he implied that haemorrhoids were not to be considered lightly because he recommended ligature rather than cautery for some patients.

Renaissance Surgry : (c . A . D . 1550 to 1650) :

In spite of important advances in microscopic anatomy , pathology and physiology , little new was added to surgery of the colon and rectum during this period . The actual practice of medicine continued largely to be that described in previous generations.

Consolidation or Intermediate Period : (c. A. D. 1650 to 1850)

An excellent view of German and English surgery can be gained from Lorenz Heister 's "general system of surgery " published in German in the middle of 18th century and rapidly translated into English .

This appear to link the Salernan - Arabic - European Surgery .

For bleeding haemorrhoids Heister recommended that the patient be placed upon a bed with his legs held by two strong assistants , the bleeding piles were then tied with a needle and a thread and the distended parts distal to ligature excised. Internal blind piles were treated similarly by first inserting a speculum into the rectum .

The Baron Guillaume Dupuytren (1777-1835) was one of the most infleuntial and successful surgeons of any age . He is

considered the foremost technician of his day , and his lectures and demonstrations were attended by students and physicians from around the world .

Dupuytren described excision of the entire haemorrhoidal mass and described his method in great details : "The haemorrhoids was grasped with forceps while an assistant separated the buttocks, with a pair of scissors the haemorrhoids was excised while traction was placed upon it . Only a portion of the projecting mass was excised . Once the traction was released and the anus regained its normal spasm no haemorrhoidal mass would be seen . External haemorrhoids were more easily excised , and the occurrence of massive bleeding frequently fatal ".

Dupuytren recommended the insertion of a pig 's bladder into the rectum which was then distended in order to stop post haemorrhoidectomy bleeding which could not be stopped by cautery .

Recent History of Haemorrhoids :

The discoveries of anaesthesia and diagnostic endoscopy moved anal surgery into the modern era and made possible the advances of surgical practice .

In 1871 a new and secret treatment consisting of the injection of certain chemical substance into the haemorrhoids was widely advertised to the profession and laity as " a painless cure for piles without surgery".

To administer the treatment a large number of individuals appeared on the scene ; some had been regular physicians who left their homes and practice with the hope of making their fortunes through use of the revolutionary discovery . Most of them were unqualified quacks ; ignorant of the science of medicine and eager to exploit the public for financial gain .

It is interesting to note that the first hypodermic needle introduced by Charles Gabriel Pravaz a French physician prior to 1853.

Although mystery surrounds the earliest use of injection treatment , it is generally believed that phenol from the beginning was one of the active ingredients used , and that haemorrhoids prolapsing outside of the body were the type usually selected for treatment because suitable specula were not then generally available .

Whitehead in 1882 described a method of circular excision of the whole pile bearing area of the anal canal as a tubular segment, the lower edge of the rectal mucosa then being sutured circumferentially to the skin of the anal canal .

Whitehead's operation resulted in replacement of the anal skin by mucous memberane , with a resultant wet anus and mucosal prolapse .

However , modifications of the circular excision method with suturing of the preserved skin into the anal canal is still used in the United State usually under the title of anoplasty .

In 1888 Frederick Salmon the founder of St Mark's hospital introduced his modefication which acquired the name of "stripping operation ", which consisted of making a cut with scissors at the mucocutanecus junction of the pile and stripping the mucosa-covered portion up to the top of the anal canal , where it was ligated and the excess excised .

This operation was said by Allingham (1901) , one of Salmon's successors at St Mark's hospital , to be followed by mush less pain than the older type of ligature operation .

Mitchell of Belfast (1903) and Earle (1911) , introduced the method of excision of individual pile with suture over a clamp .

By this method no raw areas were left to granulate and Mitchell claimed that the wounds were invariably soundly healed within eight to ten days . Bacon (1949) of Philadelphia has varied the technique further by passing the suture not over but as a continuous mattress stitch , under the clamp and stated that this controls haemorrhage satisfactorily .

Miles (1919) introduced his operation (low ligation) to avoid extensive denudation of the anal canal of its mucous lining as occurred with Salmon's operation of high ligation .

Miles never excised any of the pile distal to the ligature because he thought that escape of blood might reduced the size of pile stump and predispose to slipping of the tie . The entire haemorrhoids was thus left to slough off .

In 1939 Milligan and Morgan gave their calssical description of the anatomy of the anal canal , they described the modification of Mile's operation (1919) ; they emphasied that the ligated pile pedicle in their operation was tethered in the lower

part of the anal canal by the longitudinal fibres running through the internal sphincter and so was prevented from riding up and leaving a large raw area in the wall of the anal canal .

The maintenance of mucosal cover , they claimed , avoided the risks of the stricture formation associated with high ligation .

In 1952 Turell described a modification of Earl's operation, he dissects the pile off the underlying muscle to a point above the pectinate line , this is now clamped , the excess pile removed and a ligature is applied over the clamp which stops short of the pectinate line . So it avoids incorporating sensitive anal mucosa in the ligature and the anal wound is left to allow free drainage .

In 1956 Parks has proposed a modification of the ligature operation , originally suggested by Ptit (1774) and Cooper (1803) , which termed a (submucosal haemorrhoidectomy with high ligation).

This operation is performed entirely within the anal canal with the aid of a bivalve sepculum . the principal is to open up