

# بسم الله الرحمن الرحيم



**HOSSAM MAGHRABY**



# شبكة المعلومات الجامعية

## التوثيق الالكتروني والميكرو فيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
على هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

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# بعض الوثائق الأصلية تالفة



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بالرسالة صفحات

لم ترد بالأصل



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# **Comparative Study between Fistulectomy and Cutting Seton in Treatment of high Perianal Fistulae**

(THESIS)  
(M. B. B. Ch.)

B 14455

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Submitted for Partial Fulfillment of the Master Degree  
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2001

بسم الله الرحمن الرحيم

"و علمك ما لم  
تكن تعلم  
وكان فضل الله  
عليك عظيما"

صدق الله العظيم

To

My *F*amily

and

My *F*iancé



# Acknowledgements

Praise be to Allah, the merciful, the compassionate for all the countless gifts he offered me ; of these gifts, those persons who were assigned to give me a precious hand so as to be able to fulfill this study.

Some of them will be cordially acknowledged.

It's is to my great honour to express my sincere thanks, appreciation and gratitude to my Professor Dr. Alaa Abd El- Aziz, professor of general surgery, Faculty of Medicine, Assiut University, for his kind supervision, advice, constructive criticism and constant encouragement, constant help, suggestions for improvement and valuable instructions.

I would like to express my sincere gratitude, deepest acknowledgment and appreciation to Professor Dr. Gamal Abd El-Hamid professor of general surgery, Faculty of Medicine, Assiut University, for his encouragement and for continuous advice, support and guidance throughout this work and for his valuable assistance.

I would also like to express my deepest gratitude, appreciation and particular thanks to Dr. Alaa Radwan, lecturer of general surgery, Faculty of Medicine, Assiut University, who reviewed my work at every stage of its development and generously offered his cooperation, encouragement, assistance and advice and suggestions for improvement.

I am much obliged to all members of surgery department.

*Ali Saad Ali*

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**Introduction**

**and**

**Aim of the Work**



# Anatomy of the Rectum and Anal Canal

## Rectum

*begins*

The rectum begins at the sacral promontory. The rectum descends caudally, following the curve of the sacrum first downwards and then forwards for a distance of 13 to 15 cm to end at the anorectal ring, or at the top of the anal canal.

This ring is formed by the pelvic floor muscles (puborectalis muscle, internal anal sphincter (IAS), and deep part of the external anal sphincter (EAS).

The rectum has three lateral curves. The upper and lower curves are convex to the right, whereas the middle curve is convex to the left (Fig. 1).

On the intra-luminal aspect of these curves are the valves of Houston. These infoldings incorporate all layers of the rectal wall except the longitudinal muscle layer (Pemerton, 1991).

The rectum is about 12 cm long is continuous with sigmoid colon at the level of the 3<sup>rd</sup> piece of the sacrum and there is no change of structure at the junction.

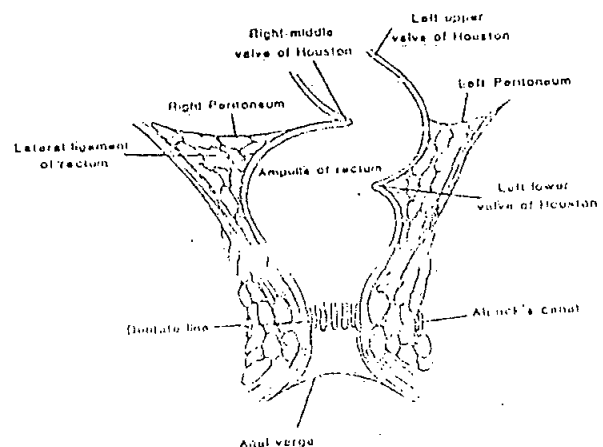


Fig. (1) : The curves of the rectum. The upper and lower curves are convex to the right, whereas the middle curve is convex to the left. The three valves of Houston are also seen. Note the peritoneum is reflected from the rectum at the level of the middle value (After Pemerton, 1991).

The three taeniae of the large intestine, having broadened out over the sigmoid, come together over the rectum to invest it in a complete outer layer of longitudinal muscle, so there is no sacculations as in the colon, and also there is no appendices epipolcae.

The rectum possesses no mesentery. The peritoneum covers the upper third of the rectum at the front and sides, and the middle third only at the front; the lower third is below the level of the peritoneum which is reflected forwards on the upper part of the bladder (in the male) or upper vagina to form the rectovesical pouch or rectouterine pouch (of Douglas) (Fig. 2).

These pouches from the lowest parts of the peritoneal cavity, and being 7.5 and 5.5 cm from the anal margins in the male and female respectively are within the reach of the fingertip on rectal examination (*Last, 1990*).

Posteriorly, the rectum has a branch of the superior rectal artery on each side, and is separated only by a layer of pelvic fascia from the sacrum, coccyx and anococcygeal ligament in the median plane, and on each side from the muscles attached to these piriformis, coccygeus and levator ani.

Between these structures and the pelvic fascia are the median sacral vessels, a sympathetic trunk on each side and the ganglion impar on the coccyx. Lateral to these are the lateral sacral vessels and the lower sacral and coccygeal nerves.

Laterally, the rectum is in contact with the peritoneum superiorly, and anteriorly with the fat and fascia over coccygeus and the levator ani muscles. Some of this fascia, is condensed around the middle rectal artery, passes to the fascial sheath of the rectum and helps to hold it in position (*Romanes, 1981*).

### **Blood Supply :** (Fig. 2)

This is derived principally from the superior rectal artery, with contribution from the middle and inferior rectal and median sacral vessels.

# Review of literature



The lower end of the inferior mesenteric artery enters the sigmoid mesocolon and changes its name to superior rectal on crossing the pelvic brim. It crosses the left common iliac vessels medial to the ureter and descends in the base of the medial limb of the mesocolon.

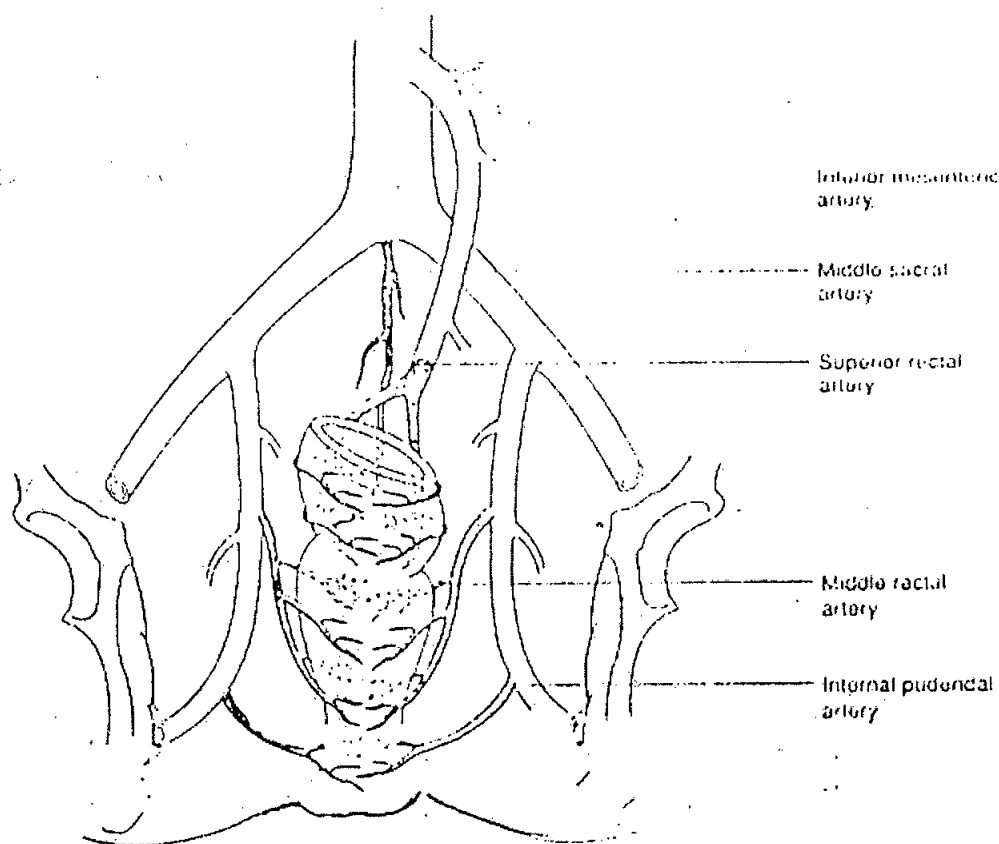


Fig. 2 : Arterial supply of the rectum and anal canal (*After Nivatvongs, 1990*).

At the level of S3 vertebra (where the rectum begins) it divides into various branches which, contrary to long-standing opinions, do not usually occupy the 3/7 and 11 o'clock positions as viewed in a patient in the lithotomy position (Although these are the positions of the venous Cushions in the anal canal).

These vessels sink into the muscular wall and supply the whole thickness of the rectal wall including the mucous membrane, and continue within the mucosa into the anal canal.