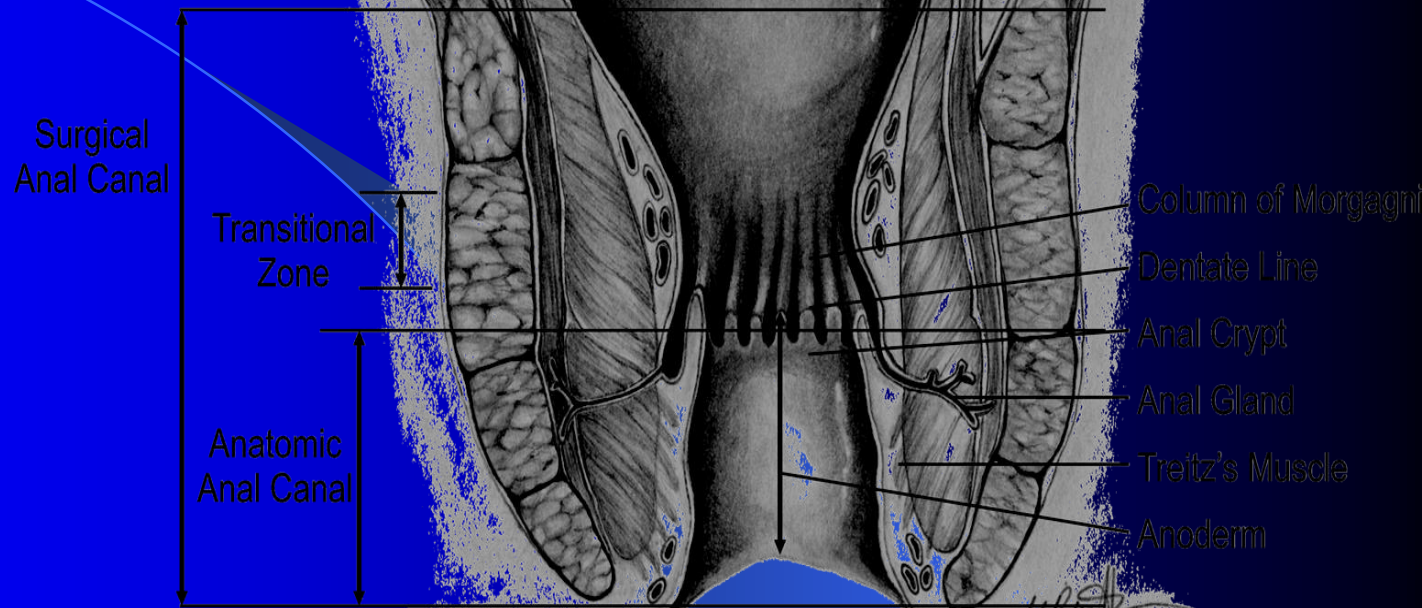


# Colorectal Surgery Why Specialize?



**Paul A. Lucha Jr., DO, FACOS, FAOCPr**  
**CAPT, MC, USN (ret)**

# Introduction

- Why develop the specialty?
- What does the specialty training bring to patient care?
- Is there a need for the training?
- Isn't current training in surgery adequate?



# Introduction

- What does a colon and rectal surgeon do?
  - Colonoscopy
    - One of the specialties leading to the establishment of colonoscopy as a screening tool
  - Development of the ileo-anal pull through (J-pouch)
    - Eliminating the need for permanent stoma formation
  - Forefront of the increase in sphincter sparing procedures performed for rectal cancer

# Introduction

- What does a colon and rectal surgeon do?
  - The development of procedures to aid in continence
    - Sphincter repair
    - Muscle transplantation
    - Artificial Sphincters
    - Nerve/ Muscle stimulator implantation
  - Refinement of surgical procedures to treat
    - Rectal prolapse
    - Hemorrhoids
    - Rectocele

# History

- Mid 1800's
  - Frederick Salmon
    - Founder of St. Mark's Hospital
  - William and Herbert Allingham
  - Founders of Proctology in UK
- 1878
  - Dr. Joseph Matthews
    - Studied Under Drs Allingham
    - Brought his expertise back to Kentucky
    - Established the field of Proctology in the US

# Pilonidal Sinus Disease



# History

- 1883
  - Dr. Matthews established the Department of Proctology at the Kentucky School of Medicine
- 1899
  - American Proctologic Society Established
  - Incorporated into the American Board of Proctology in 1935



# History

- American Board of Proctology
  - 6<sup>th</sup> Specialty Board to be organized
  - 10<sup>th</sup> Specialty Board to be incorporated
  - Remained a subsidiary of the American Board of Surgery until 1949
- 1961
  - The American Board of Proctology was granted permission to adopt the name The American Board of Colon and Rectal Surgery

# Hemorrhoids



# History

- There are about 41 Fellowship programs in Colon and Rectal Surgery in the US and Canada
- Applicants must
  - Complete 5 years in General Surgery
  - Be board eligible or certified by the American Board of Surgery
  - Program length is 1 year (optional 2<sup>nd</sup> year in some programs for research)

# Rectal Prolapse



# The Need

- Walter Longo MD
  - Colon and Rectal Surgery.....true specialty. Expertise can have a favorable impact on patients....It will impact favorably on patients with rectal cancer by both increased sphincter saving procedures and decreased local recurrences....Within the academic setting, the path is paved.....research initiatives. Its multifactorial role in education, character building and as a role model has yet to be realized.

# The Need

- Medical Student Education
  - Limited exposure to anorectal pathology
    - Despite ~5% of the American Population Presenting with Hemorrhoids
  - Teaching in anorectal examinations
    - EVMS Standardized Patient
    - Informal Survey Results

# Hemorrhoids



# The Need

- Surgery Residents
  - Resident Programs with Colon and Rectal Surgery Specialists
    - Increased numbers of anorectal and colon procedures
  - Programs with Colon and Rectal Specialists have greater number of residents applying for fellowship in colon and rectal surgery



# Neoplasm



# The Need

- Surgery Residents

- 2006-2007 Academic Year

- ADS data base query (surgery resident case logs)

- US averages

- Chief Resident

- Hemorrhoids 1.4
- Anorectal Abscess/ Fistula 1.1
- Pilonidal Disease 0.4

- Totals over 5 years

- Hemorrhoids 6.8
- Anorectal Abscess/ Fistula 6.0
- Pilonidal Disease 3.4

# The Need

- Surgery Residents
  - Summary 2006-2007
  - Most Finishing Residents in the US have performed fewer than 16 anorectal procedures during the proceeding 5 years
- Colon and Rectal Fellows
  - Perform substantially more endoscopy, anorectal procedures and index abdominal procedures in one year than a surgical resident performs in 5 years.

# Fistula In Ano and Abcess



# The Need

- One practice survey
  - About 10,000 outpatient visits per year
  - 1118 patients had codes for anorectal pathology
    - ~10% of the visits were for anorectal complaints
    - Most complaints were treated on an outpatient basis.
    - ~10% of the anorectal patients resulted in an operative procedure (main operative suite) excluding endoscopy.
- Significant need in the average GS Practice

# Summary

- The level of instructional training to both residents and students is on average poor.
- There is a significant need to provide better physician education
- Specialty training in colon and rectal disease may have an increased need as limitations continue on resident and student educational time.



... or by CH46

# Common Anorectal Conditions

Paul A. Lucha Jr., DO, FACOS, FAOCPr



# Introduction

- Anorectal complaints are common
- Majority are referred as “hemorrhoids”
- Prospective review of HMO in NY
  - 50% of patient referred for hemorrhoids have some other pathology responsible for their symptoms

# Topics of Discussion

- Patient Evaluation
- Pilonidal Sinus Disease
- Hemorrhoids
- Anal Fissure

# Topics of Discussion

- Fistula In Ano
- Anorectal Abscess
- Rectal Prolapse
- Pruritis Ani
- Neoplasm

# Patient Evaluation

- Detailed History
  - Pain
  - Bleeding
  - Change in habits
  - mucous or discharge
  - incontinence
  - swelling or masses
  - protrusion
  - Associated medical history

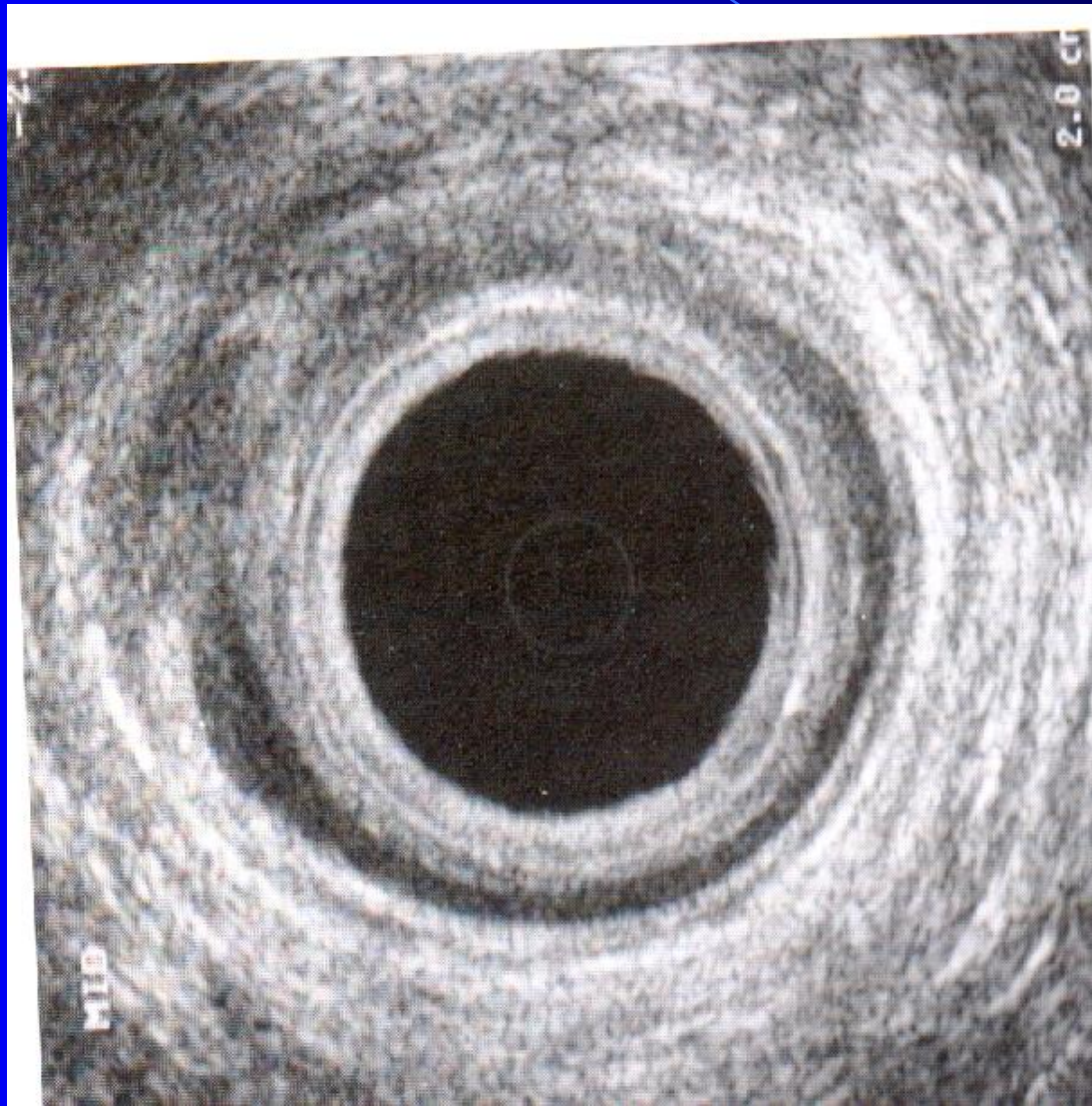
# Patient Evaluation

- Physical examination (position)
  - DRE
  - Inspection (good lighting)
  - palpation
- Anoscopy
- Rigid Sigmoidoscopy
  - Proctosigmoidoscopy
- Flexible Sigmoidoscopy

# Patient Evaluation

- Radiology
  - TRUS
  - MRI
  - CT
  - ACBE
  - Fistulography
    - H<sub>2</sub>O<sub>2</sub>
    - contrast

# Patient Evaluation



# Pilonidal Sinus Disease

- More common in Men than Women
- Greatest incidence puberty to age 40
- Etiology questionable
  - congenital (remnants of medullary canal)
  - deep natal cleft
    - Hair follicles
    - Hair inclusion



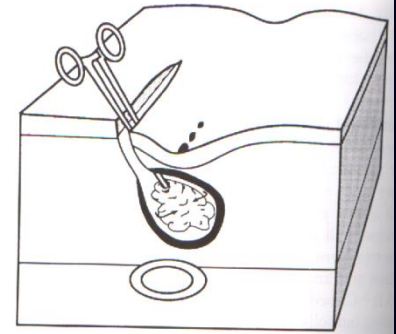
# Pilonidal Sinus Disease

- High recurrence rate
  - congenital theory unlikely
- Multiple modes of therapy
- may present as abscess or sinus

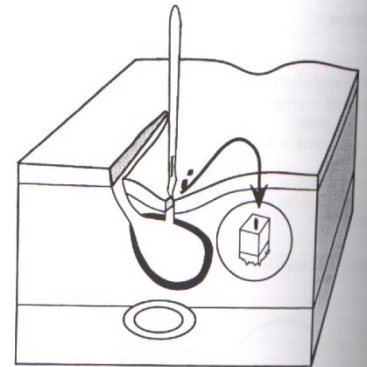
# Pilonidal Sinus Disease

- Incision and drainage
- Excision of follicles
  - Bascom technique
- Excision and primary closure
- Marsupialization
- Sliding grafts
  - obliterate the natal cleft

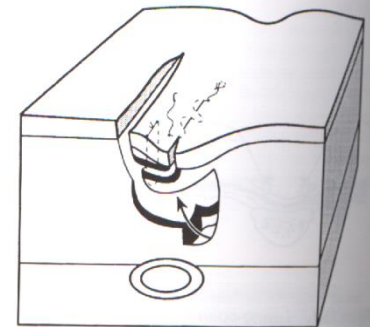
# Pilonidal Sinus Disease



**Figure 15.4.** Lateral incision and debridement of cavity as described by Bascom.



**Figure 15.5.** Removal of a midline pit with a small incision after lateral debridement (see Fig. 15.4).



**Figure 15.6.** Closure of midline wounds without closure of the lateral incision.

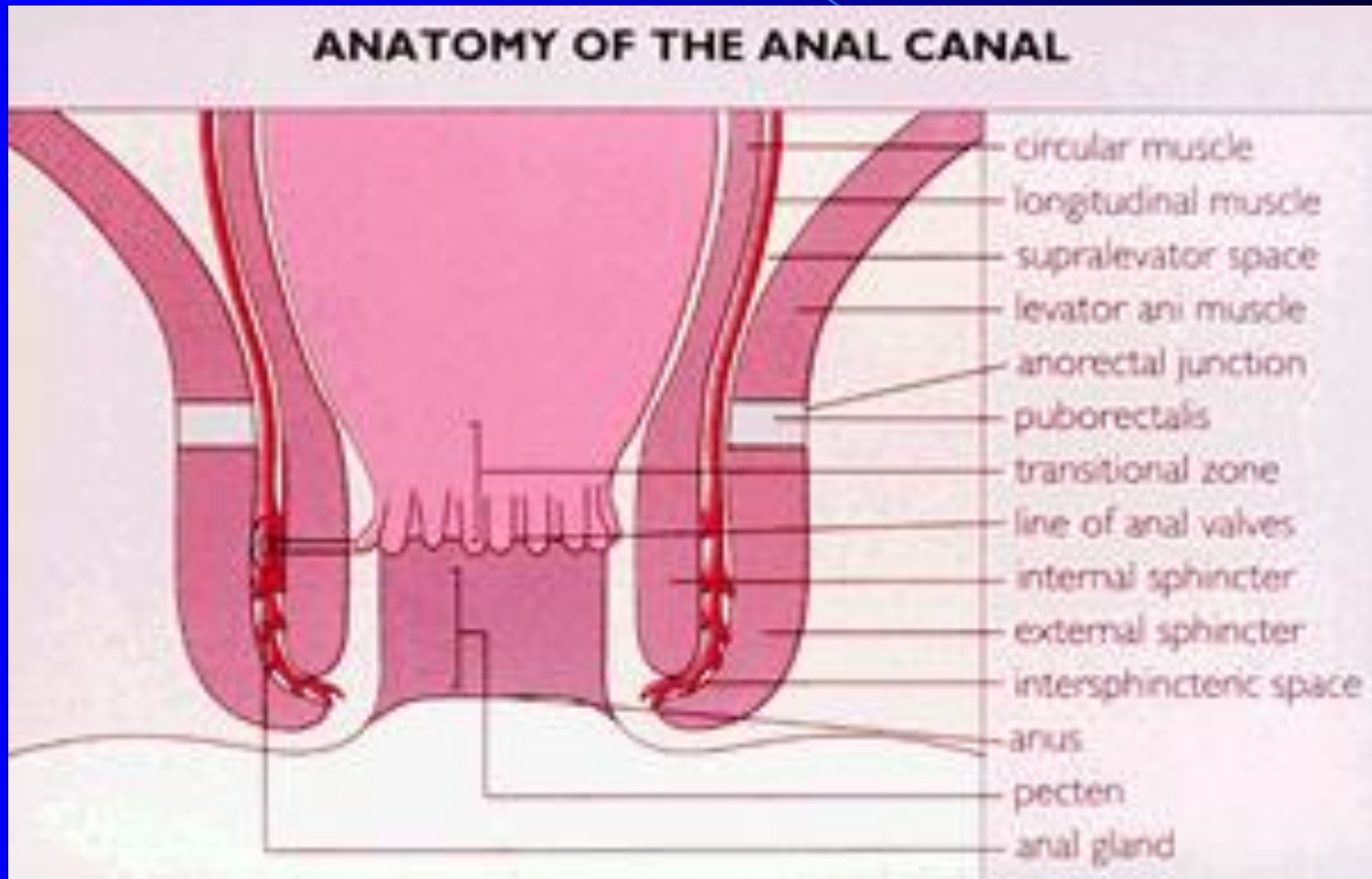
# Pilonidal Sinus Disease



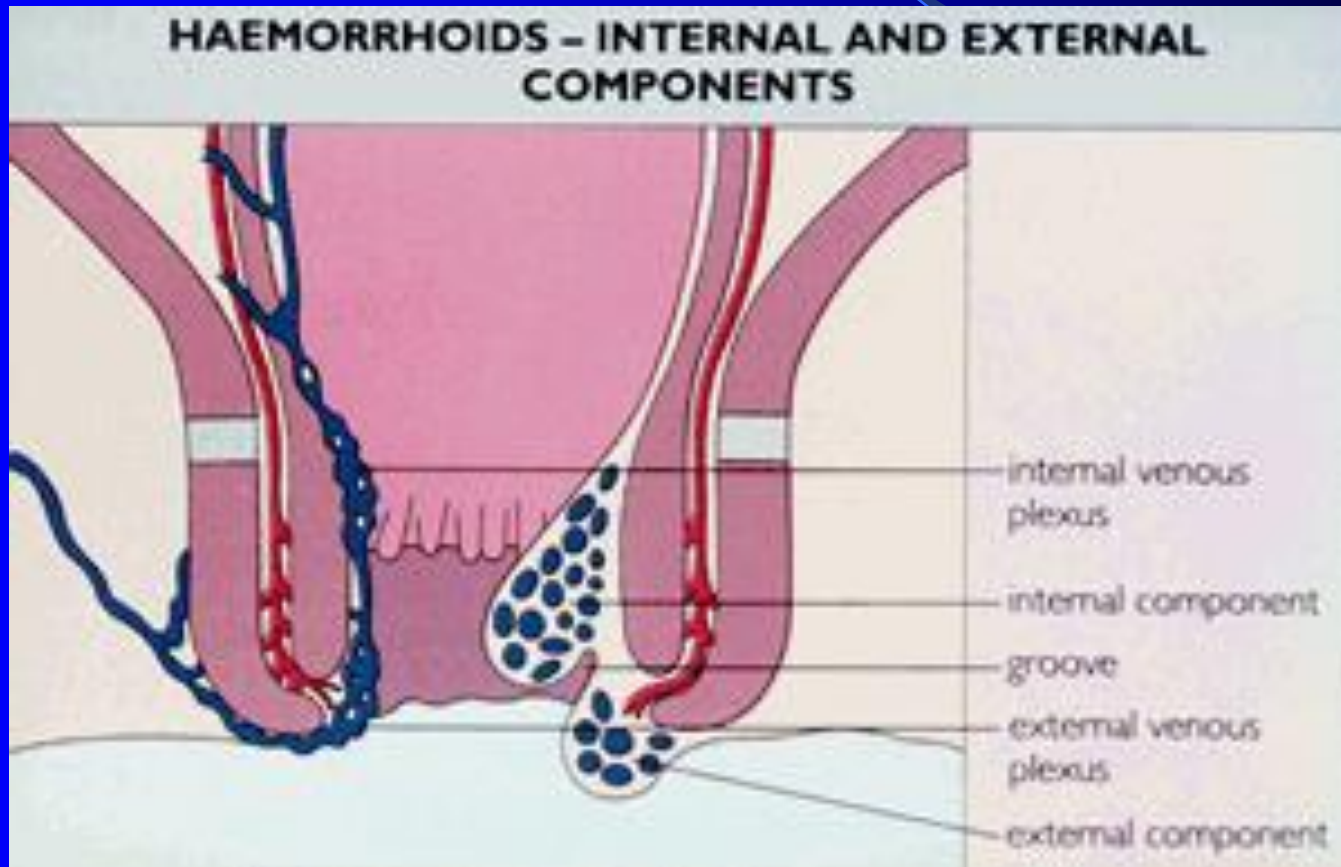
# Hemorrhoids

- Common problem
- Just look at the OTC preparations and ads
- Hemorrhoids are endovascular cushions found in all patients
  - Not varicose veins of the anal canal
  - symptoms are related to “failure of fixation of the cushions”

# Hemorrhoids



# Hemorrhoids



# Hemorrhoids

- History-Internal
  - Bleeding
  - Prolapse
  - discharge
- History-External
  - usually thrombosed
  - Pain
  - Usually not bleeding



# Hemorrhoids

- Examination
  - DRE
  - Anoscopy
  - Rigid Sigmoidoscopy
- Cannot “feel” internal hemorrhoids

# Hemorrhoids



# Hemorrhoids



# Hemorrhoids



# Hemorrhoids



# Anal Fissure

- Painful Hematochezia with BM
- Split in the anoderm at the level of the dentate line
- 90% posterior
- Atypical location think Crohns disease
- Sentinel Pile (skin tag)
- Painful DRE

# Anal Fissure

- DDX
  - Crohns disease
  - Trauma/abuse
  - infectuious etiology (STD or TB)
  - anal cancer
  - AIDS

# Anal Fissure

- Treatment
  - Stool softeners (bulk laxitives)
  - Analgesics
  - Botulinum Toxin
  - NTG
  - Lords procedure
  - Lateral Sphincterotomy



# Anal Fissure



# Fistula In Ano and Abscess

- Cryptoglandular in origin
- Anal pain is presenting symptom
- may have palpable mass

# Fistula In Ano and Abcess

- Treatment of abcess is drainage
- 50-60% of patients with abcess will not develop a fistula
- Treatment of fistula depends on anatomy (sphincter involvement)

# Fistula In Ano

- Evaluation
  - EUA
  - TRUS
  - MRI
  - CT

# Fistula In Ano

- Classification
  - Intersphincteric
  - Transphincteric
  - Suprlevator (suprashincteric)
  - Extrasphincteric

# Goodsall's Rule

complicated upward extension. Cirocco and Reilly<sup>41</sup>

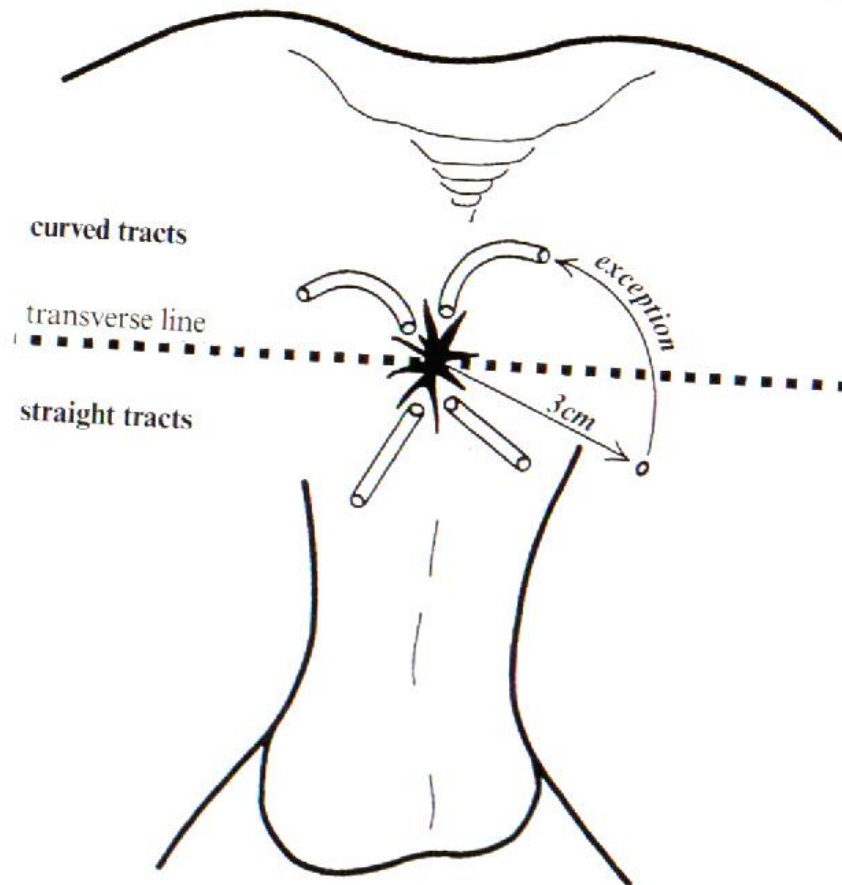
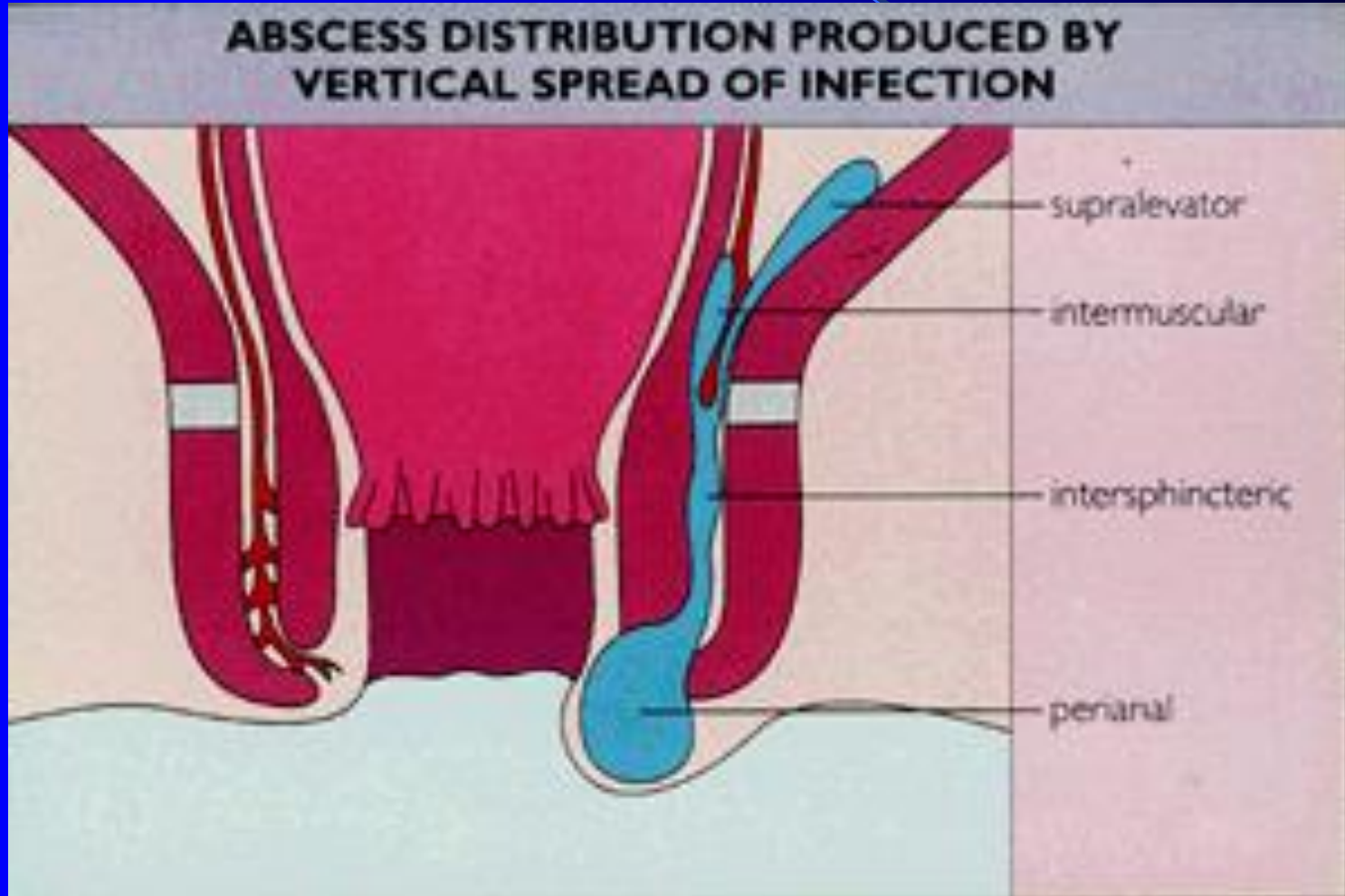


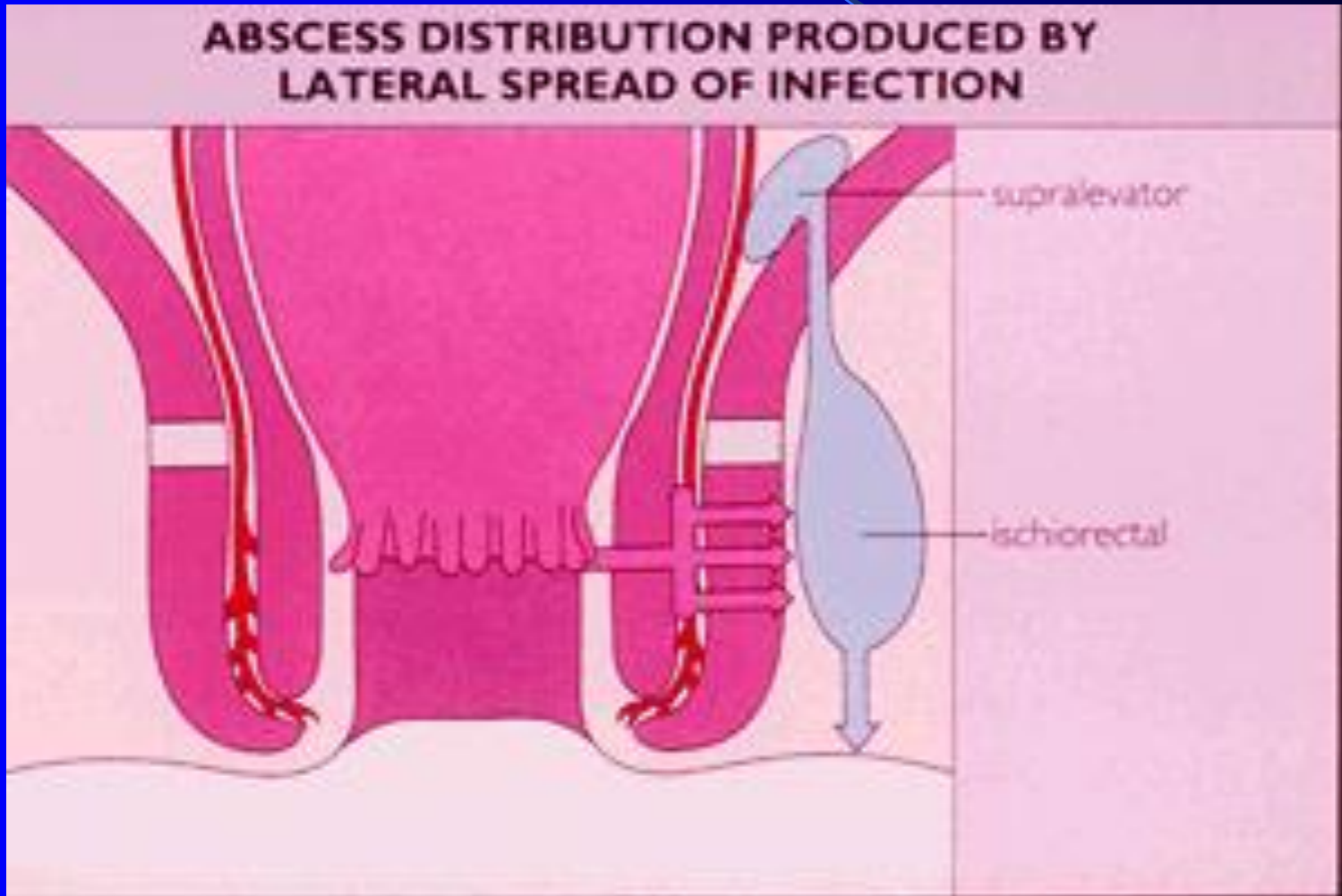
Figure 10.10. Goodsall's rule.

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# Fistula In Ano



# Fistula In Ano





# Perirectal Abscess



# Rectal Prolapse

- Occurs at extremes of life
  - Children
  - Geriatric Population
- Usually female

# Rectal Prolapse

- Symptoms
  - discharge
  - incontinence
  - bleeding

# Rectal Prolapse

- Treatment
  - Nonsurgical
    - children (manual reduction)
  - Surgical
    - Perineal approaches
    - Abdominal approaches

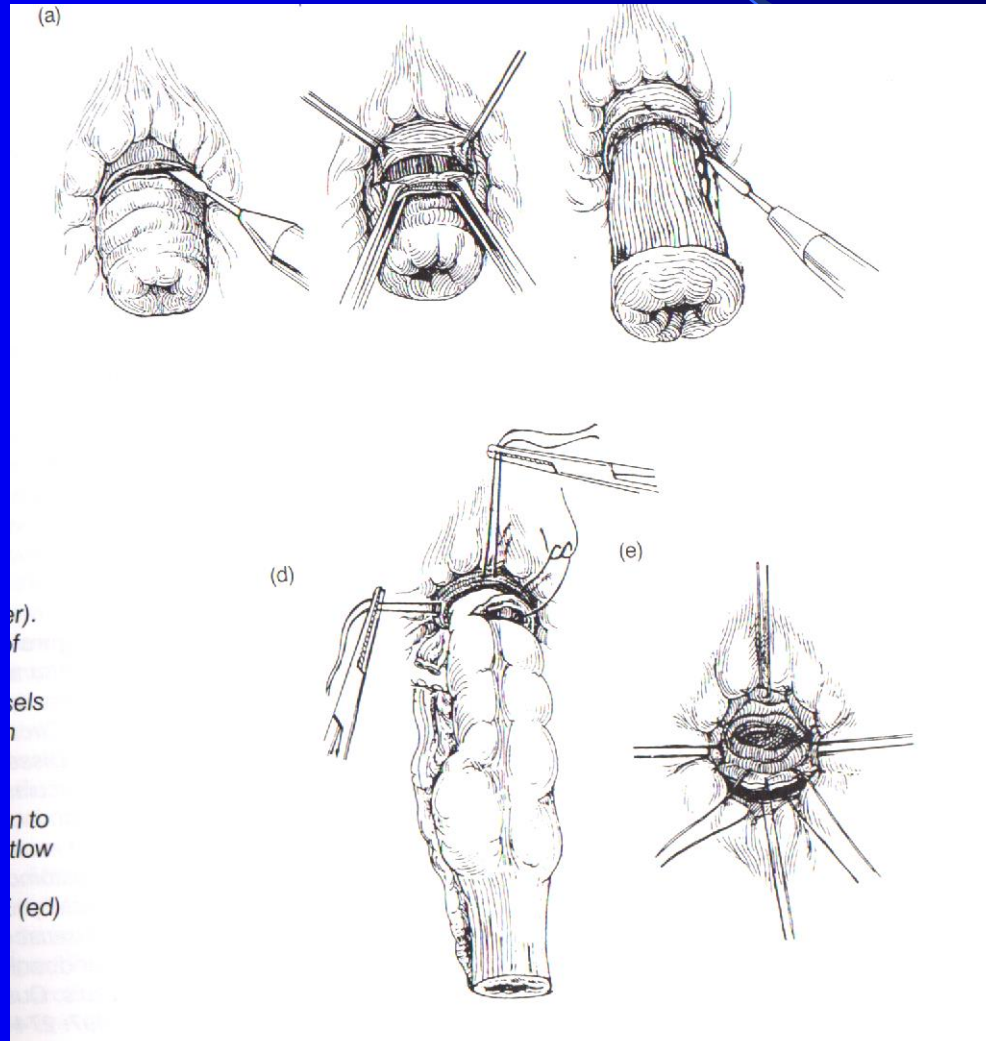
# Rectal Prolapse

- Abdominal approaches
  - rectopexy
  - Ripstein
  - Ivalor Sponge
  - Sigmoid resection

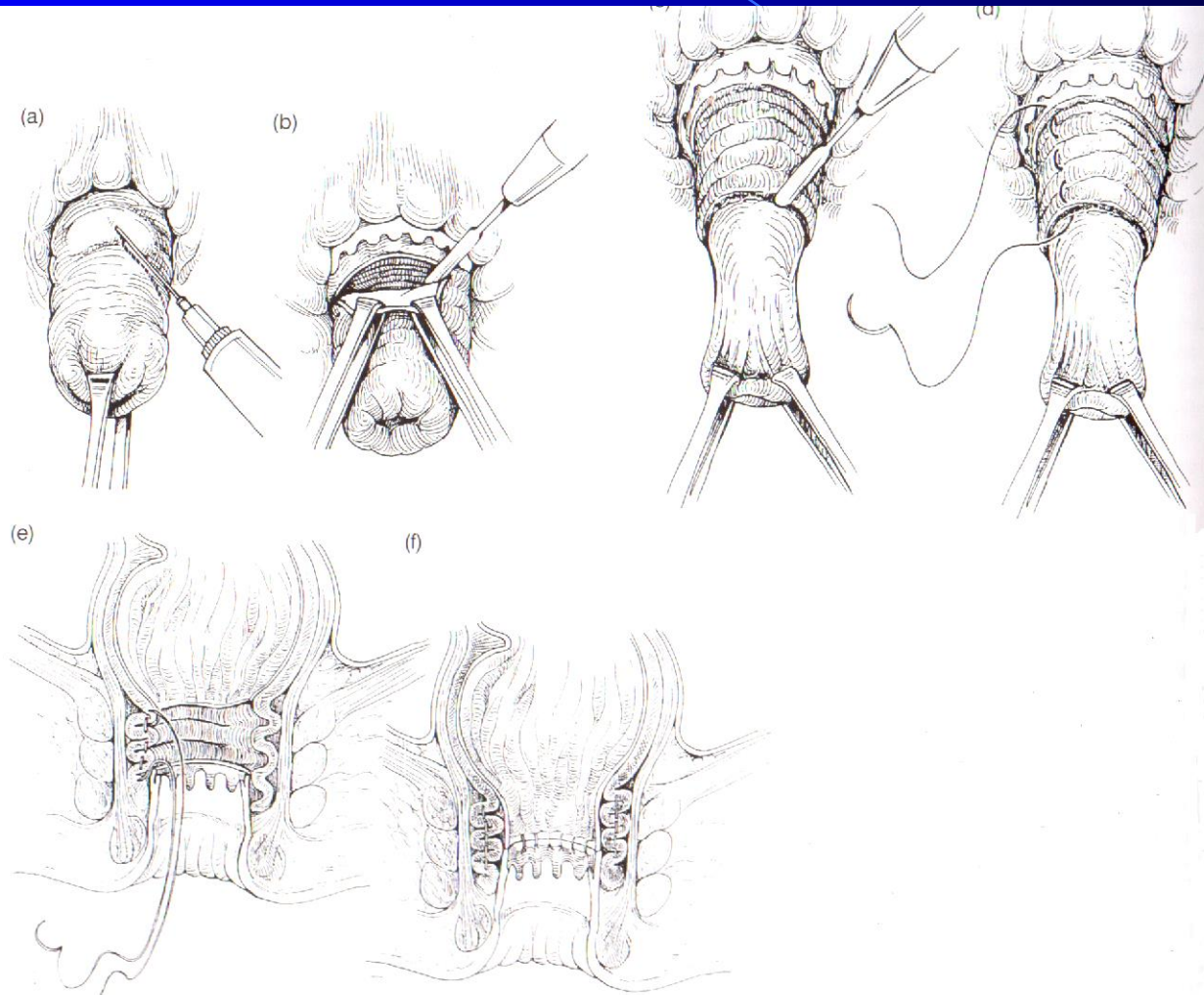
# Rectal Prolapse

- Perineal approaches
  - Altemeir resection
  - Delorme resection
  - Thiersch

# Rectal Prolapse

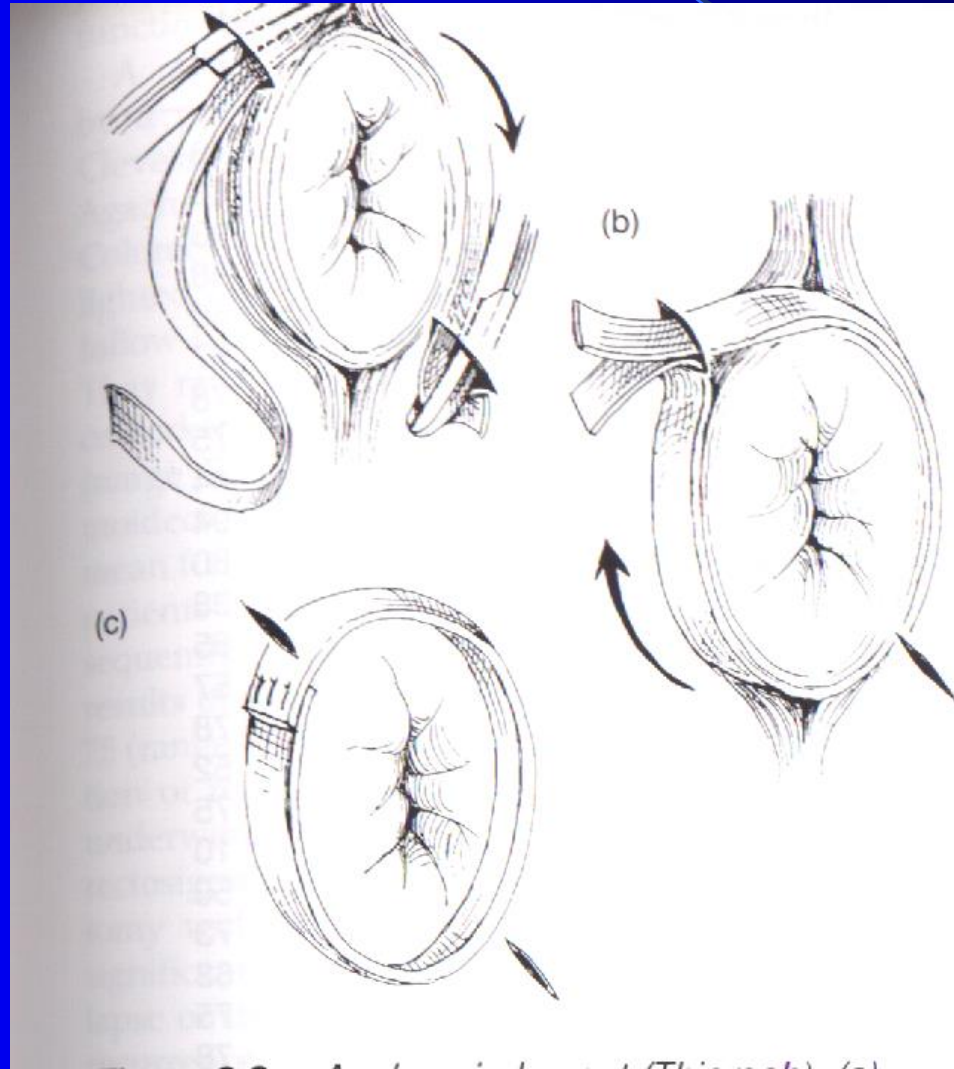


# Rectal Prolapse





# Rectal Prolapse



# Rectal Prolapse



# Pruritis Ani

- Common problem
- dermatitis of perianal region
- severe disease may present with bleeding
- look for systemic disease
  - diabetes

# Pruritis Ani

- Treatment
  - stop itching
  - corticosteroids
  - antifungals
  - no soap
  - dry area
  - bulk laxitives

# Neoplasm

- Anal cancer
  - squamous cell cancer
  - anal duct carcinoma (adenocarcinoma)
  - Cloacogenic carcinoma
  - Bowen's Disease
  - Paget's disease
- Rectal cancer

# Summary

- Detailed history and physical
  - to include anoscopy and proctosigmoidoscopy
- Most often anorectal complaint will be hemorrhoids



"Yes! That was very loud Mr. Trainer,  
but I said I wanted to hear your *HEART!*"