The Pelvic Floor -
The supportive apparatus that holds the pelvic organs in places
Types of Pelvic Floor Dysfunction

- Abnormal defecation
- Urinary dysfunction
- Prolapse: “bulge” pressure
- Pain
- Sexual dysfunction

Pelvic Floor Dysfunction

- Multiple symptoms frequently exist in the same patient
  - Symptoms are underreported by patients
  - Symptoms are not elicited by physicians
- Multiple pelvic floor defects (physical findings) may exist in the absence of symptoms (complaints)
- Failure to identify pelvic floor pathology may lead to treatment failures
Levator Ani

- Pelvic floor muscle
  - Striated muscle:
  - Puborectalis
  - Pubococcygeus
  - Ileococcygeus
  - Ischiococcygeus
Pelvic Floor Muscles/ Levator Ani

• Innervation
• S2-4 (superior)
• Perineal branch of pudendal nerve (inferior)
• Inferior rectal branch of the pudendal nerve
Factors That Weaken The Pelvic Floor

- Childbirth
- Aging
- Menopause
- Chronic Straining
- Neuromuscular conditions
- Radiation
Pudendal Block
Gender Differences

- Pain perception
- Stress response
- GI function/motility
- Hormonal influences
- Pelvic floor weakness
Pelvic Floor Hernia

- Cystocele
- Rectocele
- Enterocoele
- Sigmoidocele

Perineal Hernia

- Enterocoele
- Sigmoidocele

Abdominal and Vaginal approaches for suspension and fixation
Data geared at anatomic repair not functional improvement
Normal Defecation

- Motility
- Reservoir
- Rectal Sensation
- Expulsion

LEVATORS CONTRACT TERMINALLY

Anorectal Angle

- Puborectalis muscle
- U-shaped sling
- Contributes to gross fecal continence?
- Flap-valve mechanism
- Puborectalis as a sphincter?
Rectal Expulsion

CONTRACTION TO AVOID DEFECATION

- Contracted muscle

DEFECATION

- Relaxed muscle

Pelvic floor muscles

- Pelvic floor muscles
  - Failure to relax maintains rectoanal angle as a barrier to defecation
  - Laxity keeps rectoanal angle open preventing barrier function

- Anal sphincters
  - Failure to relax leads to difficult evacuation
  - Laxity or injury prevents adequate barrier function
Normal Defecation

- Stool and flatus distend the rectum
- Internal Anal Sphincter relaxes allowing for the sampling reflex
- To delay defecation, the External Anal Sphincter contracts
- To defecate:
  - Intra-abdominal pressure increases
  - Puborectalis muscle and EAS relaxes
  - Pelvic floor descends

Pelvic Hernia/ Prolapse

- Lead to mechanical obstruction
- Loss of expulsion
Dysnergic Defecation

- Failure to relax pelvic floor muscles
- Physical therapy / muscles retraining/relaxation is treatment of choice

The role of the Pelvic Floor

Conclusion

- Muscular support
- Maintain continence
Cleveland Clinic

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