

# **SUBJECT: CHILD HEALTH NURSING ANORECTAL ANOMALIES**

**PRESENTED BY**

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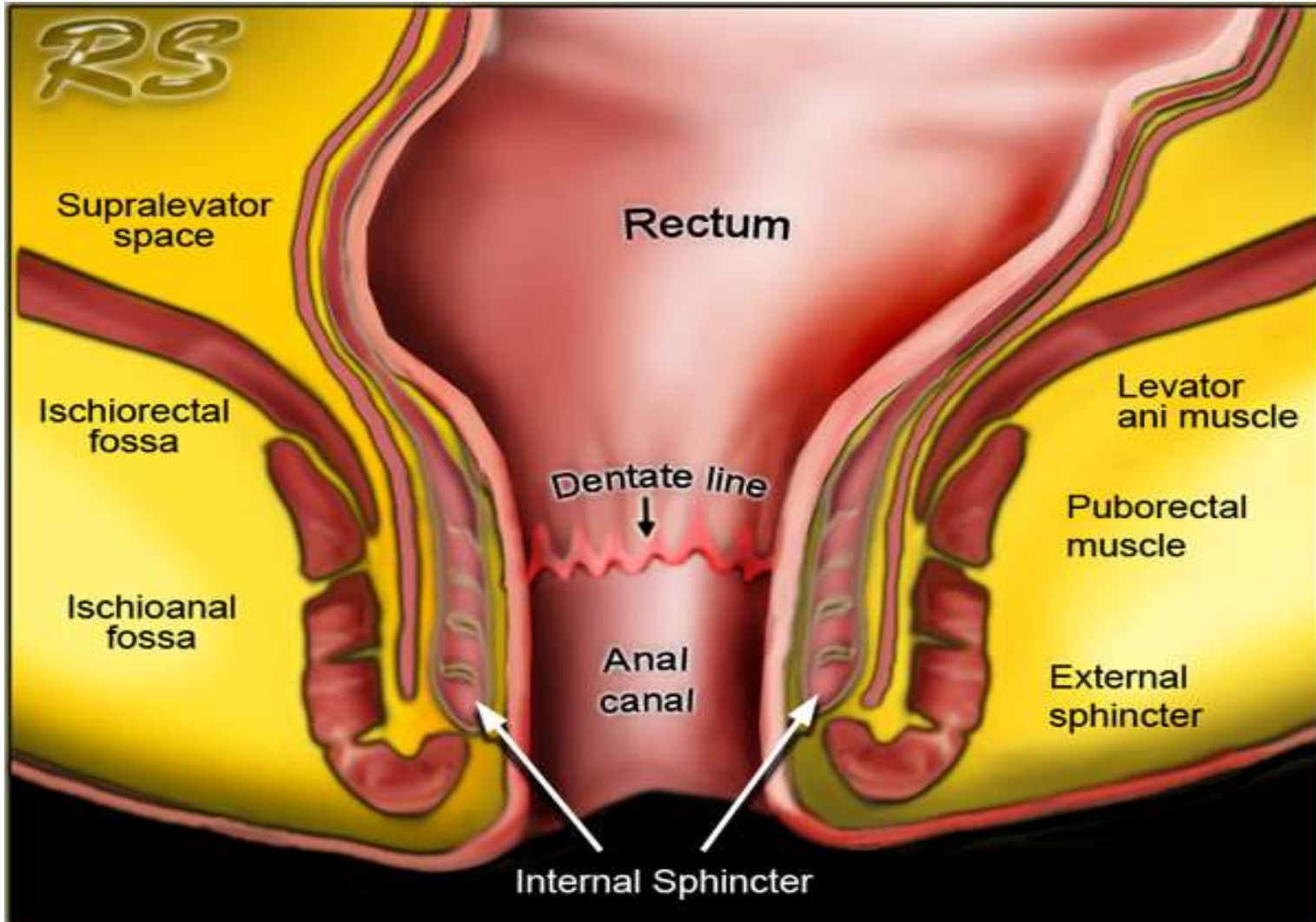
**NELLORE**

# INTRODUCTION

- ❖ Anorectal anomalies (ARM) are developmental deformities of the lower end of the alimentary tract, i.e. the anorectal canal.
- ❖ Anorectal malformations are defects that occur during the fifth to seventh weeks of fetal development.
- ❖ With these defects, the anus (opening at the end of the large intestine through which stool passes) and the rectum (area of the large intestine just above the anus) do not develop properly and bladder.
- ❖ The exact cause of these malformations is not known. It occurs due to arrest in embryonic development of the anus, lower rectum and urogenital tract at the 8<sup>th</sup> week of the embryonic life.



# ANAL ANATOMY



# CLASSIFICATION OF ANORECTAL MALFORMATIONS

| Gender        | Male   | Female  |
|---------------|--|---|
| Anatomic type | Perineal fistula                             | Perineal fistula  |
|               | Rectourethral fistula<br>Bulbal<br>prostatic | (Recto ) vestibular fistula                                     |
|               | Rectovesical<br>fistula(bladder- neck)       | Persistent cloaca<br><3cm common channel<br>>3cm common channel |
|               | Imperforate anus without<br>fistula          | Imperforate anus without<br>fistula                             |
|               | Rectal atresia                               | Rectal atresia  |
|               | Complex defects                              | Complex defects   |

## CLINICAL MANIFESTATIONS.

- Anorectal anomalies are usually diagnosed immediately after birth by the person conducting the delivery or within hours by the care givers.
- The most important features are abnormally formed or no anal opening and absence of meconium or presence of fistula may be present between rectum and vagina or perineum.
- Presence of meconium in urine may be found in some children.
- Progressive abdominal distension and vomiting may be present.
- The specific features for specific anomalies include the following



- Imperforate anal membrane: infant fails to pass meconium.
- Anal stenosis: it accounts for 10% of all ARMS. Baby will pass ribbon like stools with difficulty as the anal opening is very small.
- Rectal agenesis: accounts 75% of all ARMS. It presents with fistula. In male baby, fistula may communicate with posterior urethra and in female with upper vagina.
- Rectoperineal fistula: it is found as small orifice in the perineum, usually anterior to the center of the external sphincter. In male baby it is found close to the scrotum and in female the vulva.
- Rectovaginal fistula: it presents with a communication between rectum and vagina and stool passed through the vagina.

# DIAGNOSIS

- Physical examination is the most important diagnostic measure of ARMS.
- USG helps to locate the rectal pouch.
- X-ray with inverted infant (upside down position) invertogram or Wangenstein-rice x-ray is useful to locate rectal pouch which can be performed only after the infant is 24 hrs of age.
- Urinary fistula can be diagnosed by urine examination for presence of meconium and epithelial debris.
- Micturating urethrogram (MCU) is done to detect urinary abnormalities.



# MANAGEMENT

- The reconstructive surgery is done to correct or repair the congenital malformations. It depends upon the type of anomalies and sex of the infant.
- In case of low ARMs, rectal cutback anoplasty is done and dilatation of fistula with definitive repair or perineal anoplasty is performed for female infants.
- In case of high ARMs initial colostomy is done in the neonatal period followed by definitive reconstructive surgery as posterior sagittal anorectoplasty (PSARP) at the age of 10 to 12 months or infants having 7 to 9 kg body weight.
- Colostomy closure is done after 10 to 12 weeks of successful definitive surgery.

