

LITTLE WOMEN, BIG CARE: PEDIATRIC GYNAECOLOGY AT A GLANCE

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INTRODUCTION

In gynecology, female age is classified into 3 phases:

- Pediatric/adolescent
- Reproductive age
- Postmenopausal age

Gynaecology (from the greek word gynae = woman) It is the area of medicine that specializes in the diagnosis and treatment of diseases affecting female reproductive organs (woman's disease).

Girls with gynaecological disorders constitute 10% gynaecological patients.

Aim: Taking care of a baby girl for future maternity since birth.

Pediatric gynecology

Pediatric-adolescent or developmental gynecology has been separated from general gynecology because of the unique issues that affect the development and anatomy of growing girls and young women. It deals with patients from the neonatal period until maturity.

Subject of focus

- Reproductive physiology*
- Reproductive Psychology*
- Gynaecological disorders*

PEDIATRIC GYNECOLOGY includes

1. *Development of Genital Organs*
2. *Congenital Malformations of female genital organs*
3. *Puberty- Normal and Abnormal*
4. *Menstruation- Normal and Abnormal*
5. *Urinary Problems*
6. *Disorders of Sexual Development (DSD) (Determination of Sex)*
7. *Gynecological Problems from Birth to Adolescence*
8. *Examination of pediatrics gynecological cases*

Common gynaecological problem from Birth to Adolescence

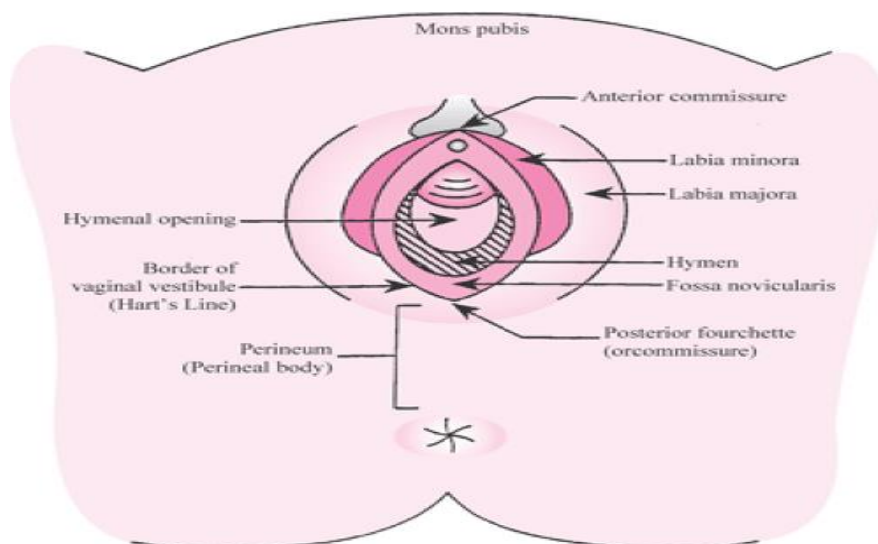
SL	PERIOD (Birth to Adolescence)	Common Gynecological Problems
1	>5 years (Neonate, Infant, Toddler & Child)	Diagnosis of sex at birth (clitoral enlargement), vaginal bleeding, labial adhesion, imperforate hymen, hydro or mucocolpos, ectopic anus, nipple discharge and vaginal discharge
2	5-11 Years (Premenarcheal)	Vulvovaginitis in childhood, abnormal vaginal discharge, vaginal bleeding, precocious puberty, trauma to the genital tract, white lesion of vulva, neoplasm
3	12-18 Years (Perimenarcheal to adolescence)	Menstrual abnormalities; delayed puberty; hirsutism; neoplasm; primary amenorrhea; leucorrhea; congenital anomalies of vagina and uterus; disorders of sexual development; pelvic pain; miscellaneous problems;

Newborn**Up to the completed 28th day of life**

Infancy	Toddler	Early childhood	Middle childhood	Early adolescence	Late adolescence
12 months	13 months -2 years	3–5 years.	6–11 years.	12–18 years.	19–21 years.

Newborn	Infant	Toddler	Preschooler	School aged child	Teens	Adolescence	College age
0-2 months	3-11 months	1-2 yrs	3-4 yrs	5-12 yrs	13-19 yrs	10-25 yrs	18-25 yrs

EXAMINATION OF GYNECOLOGICAL DISORDERS FROM BIRTH TO ADOLESCENCE



a. The genital anatomy of pre puberty girl with a crescent hymen.



b. The knee-chest position can be used to examine the vagina of a prepubertal child.



c. The otoscope is used for a light source and magnification and is not inserted into the vagina.



d. (Inspection of normal vulva)

Acute vs chronic vulvovaginitis

Features	Acute vulvovaginitis	Chronic vulvovaginitis
Onset	Sudden, short duration	Gradual, persistent or recurrent
Symptoms	Severe itching, burning, pain	Mild–moderate persistent itching, soreness
Discharge	Profuse, purulent, foul-smelling	Mucoid or scanty, recurrent, may be persistent
Redness/Inflammation	Marked erythema, edema	Mild erythema, skin thickening, lichenification
Excoriation	May be present due to acute scratching	Common, with scratch marks, fissures
Labial changes	Swollen, tender labia	Labial adhesions may occur (esp. in children)
Associated symptoms	Dysuria, pain, fever sometimes (if severe)	Sleep disturbance, irritability, recurrent UTIs
Cause	Infections (bacterial, fungal, viral), foreign body	Poor hygiene, recurrent infections, pinworms, dermatological conditions
Course	Resolves with treatment	Persistent, relapsing, may need prolonged care



Acute vulvo vaginitis



Chronic vulvovaginitis



Lichen sclerosus with the white discoloration characteristic of the disease, in a figure of eight around the vulva and anus



Labial adhesions. Fusion of the labia minora, which form a thin membrane covering the introitus and the hymen

I. Congenital Anomaly (Birth Defect)

Causes: Genetic mutations; chromosomal abnormalities; teratogens(drugs, alcohol, infections).

Examples: Imperforate hymen; Transverse vaginal septum; Müllerian agenesis (MRKH syndrome); Bicornuate uterus or Uterine Septum; Congenital adrenal hyperplasia (CAH) – leads to ambiguous genitalia; Vaginal Agenesis/Atresia.

II. Developmental Issue (Acquired Conditions)

Causes: Hormonal imbalances (hypothyroidism, hypogonadism) Environmental factors (nutrition), Chronic diseases.

Examples: Delayed puberty (due to hypothalamic-pituitary dysfunction); Precocious puberty; Hypogonadotropic hypogonadism; Functional hypothalamic amenorrhea (due to stress, malnutrition); Disorders of Sex Development (DSD) and Ambiguous Genitalia; associated with Renal and Other Anomalies; Neonatal Breast Enlargement and Secretion; Vaginal Discharge or Bleeding in Neonates; Labial Adhesions; Ovarian Cysts & Torsion; Genital Trauma (e.g., Straddle Injuries- groin injuries caused by falling on a hard object impacting the area between the legs); and Vulvovaginitis in Infancy.

III. Gynecological Abnormalities in Adolescence

Examples: Menstrual Disorders, Dysmenorrhea, Amenorrhea, PCOS, vaginal Discharge and Infections (e.g. vulvo vaginitis, STIs, vulval Injuries, Adhesive Conditions (e.g., Labial Adhesions), Breast Abnormalities, Pelvic Pain, and Contraception.



Straddle injury in an infant.



(a). Vulvovaginitis in a two-month-old girl. (b). Vulvovaginitis in a premature newborn (29 weeks of gestational age).

Special Points in Babies

Maternal estrogen effect

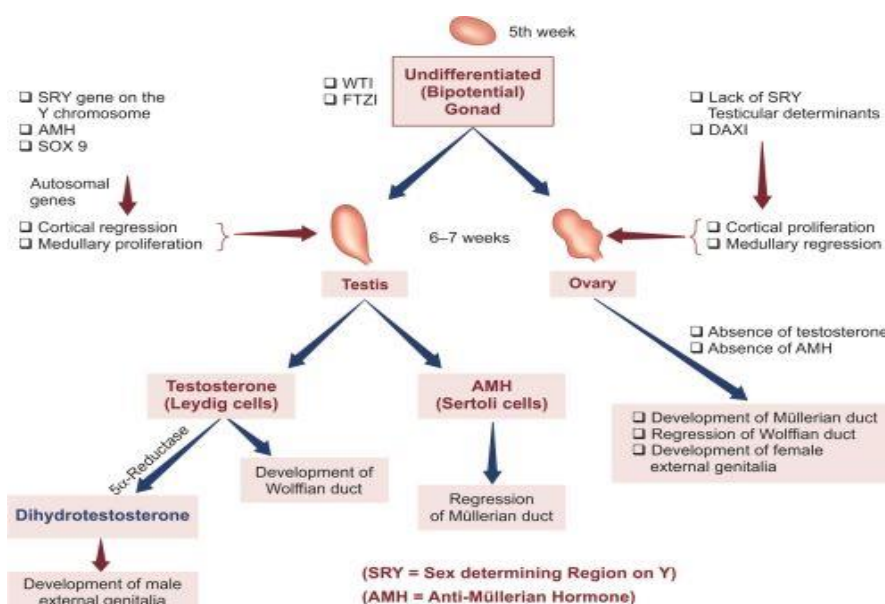
In neonates, labia majora may appear prominent, with whitish mucoid or even small blood-stained discharge (physiological).

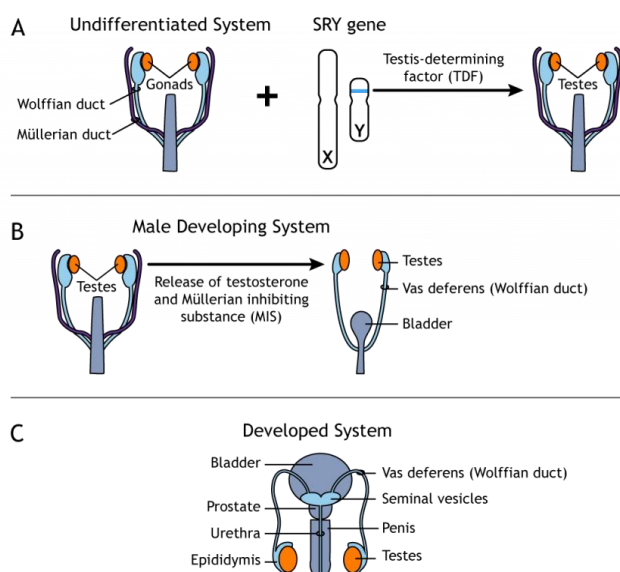
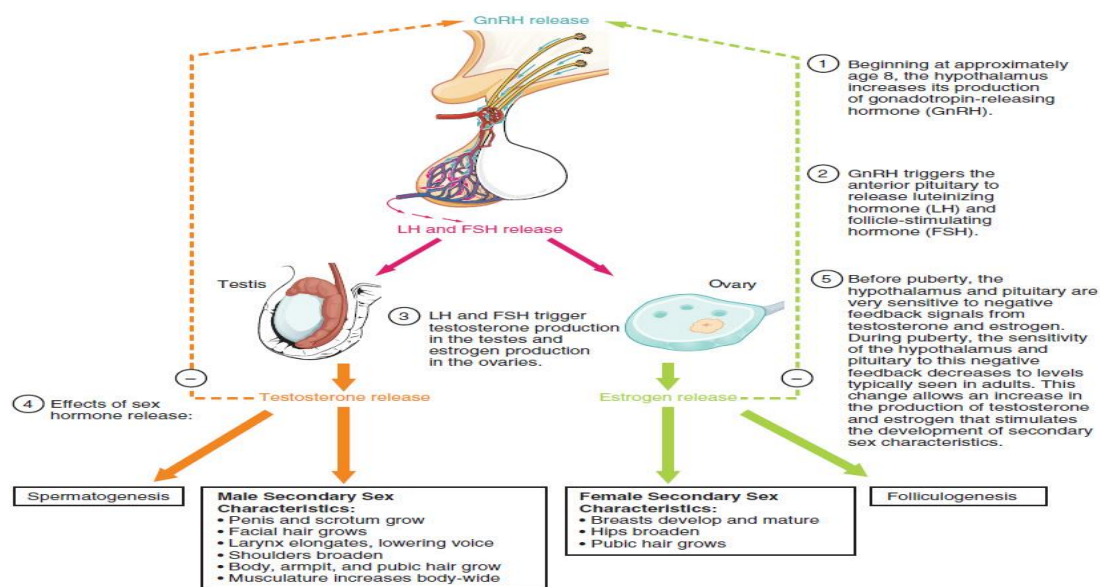
Labial adhesions

Common in toddlers.

Signs of infection, trauma, or abuse

Must be documented carefully and sensitively.





Classification of DSD (Hughes, 2008)

- A. Sex chromosome DSD (45X, 46X/46XY, 46XX/46XY, 47 XXY)**
- B. 46 XY DSD [Disorders of (gonadal) Testicular Development and/or function]**
 - Gonadal dysgenesis (complete or partial)
 - Ovotesticular DSD
 - Disorders of androgen action
- C. 46 XX DSD (Disorders of Ovarian Development and/or function):**
 - Dysgenesis
 - Androgen excess
- D. Others: Müllerian agenesis/Hypoplasia**
 - Syndromic associations (cloacal anomalies)

Testicular Feminization (Androgen Insensitivity Syndrome)

Clinical Findings

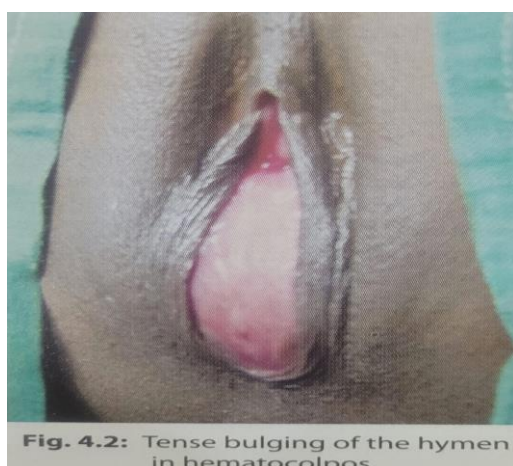
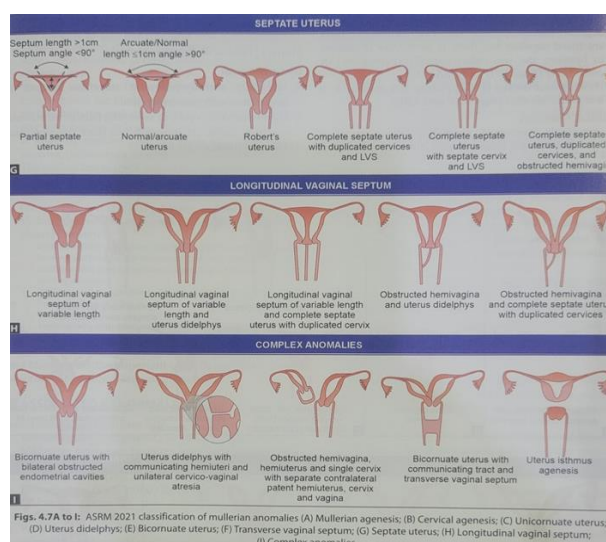
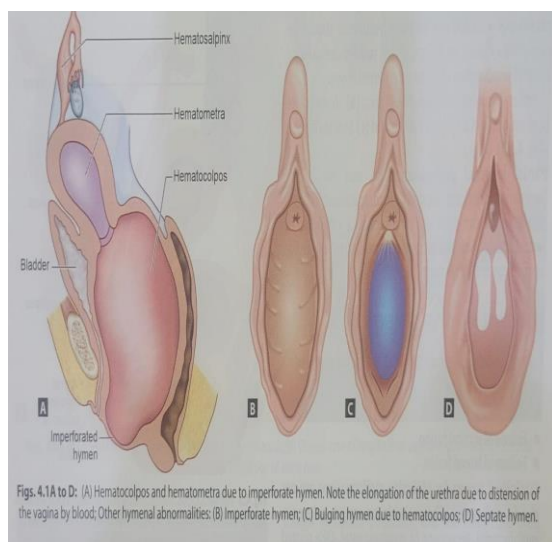
- **Genotype:** 46, XY (genetically male)
- **Phenotype:** Female external appearance (due to androgen receptor insensitivity)
- **Gonads.**
 - Bilateral **testes** present (not ovaries)
 - Usually located in **labia majora**, inguinal canal, or abdomen
- **External Genitalia**
 - Normal-looking **female external genitalia**
 - **Short blind-ending vagina** (absent or rudimentary upper vagina, uterus, fallopian tubes – because of Anti-Müllerian Hormone from Sertoli cells)
- **Secondary Sexual Characters**
 - Well-developed breasts (testosterone → aromatized to estrogen)
 - Sparse/absent pubic and axillary hair (lack of androgen effect)
- **Karyotype:** 46, XY



Fig. 28.6: Bilateral labial gonads (testes) and short blind vagina in testicular feminization.



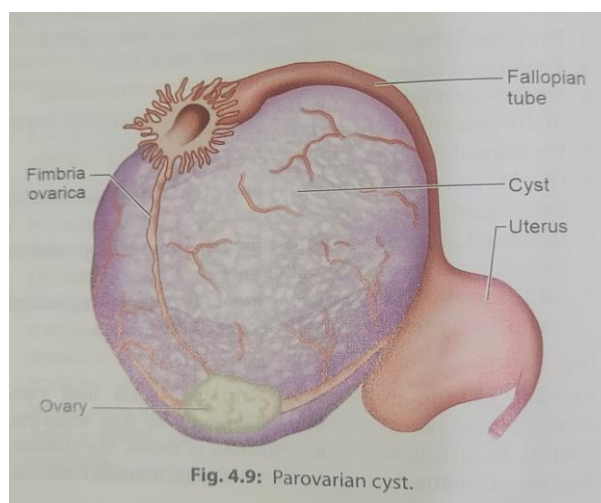
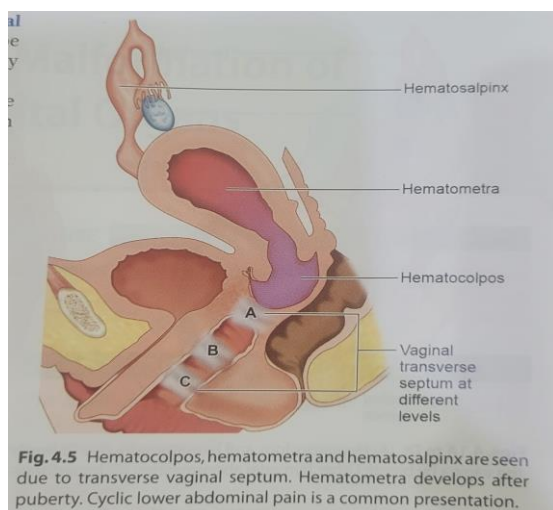
Fig. 28.7: Testicular feminization—bilateral inguinal gonads.



A paraovarian cyst is a fluid-filled sac that forms near the ovaries, but not on or inside them. sometimes called paratubal cysts because of their proximity to the fallopian tubes.

Symptoms

- Pelvic pain or discomfort
- A feeling of fullness, pressure, or bloating in the abdomen
- Frequent urination or difficulty emptying the bladder
- Menstrual irregularities (less common)



REFERENCES

1. Konar, H. (2024). *DC Dutta's textbook of gynecology*. Jaypee Brothers Medical Publishers, Chapter 33: p. 450.
2. Emans, S. J., Laufer, M. R., & Goldstein, D. P. (2020). *Pediatric and adolescent gynecology* (7th ed.). Wolters Kluwer.
3. American College of Obstetricians and Gynecologists. (n.d.). *Obstetrics & Gynecology*. Retrieved [Month Day, Year], from <https://journals.lww.com/greenjournal/>
4. American Academy of Pediatrics. (n.d.). *Pediatrics*. Retrieved [Month Day, Year], from <https://publications.aap.org/pediatrics>
5. Federation Internationale de Gynecologie Infantile et Juvenile (FIGIJ). Federation Internationale de Gynecologie Infantile et Juvenile. (n.d.). *FIGIJ*. Retrieved [Month Day, Year], from <https://www.figij.org>
6. De Silva, N., & Tyson, N. A. (2024). *NASPAG essentials of pediatric and adolescent gynecology*.
7. Nair, M. K. C., & Balakrishnan, S. (2023). *Handbook of paediatric and adolescent gynaecology*. Paras Medical Publishers.
8. Lentz, G. M., Lobo, R. A., Gershenson, D. M., & Katz, V. L. (Eds.). (2021). *Comprehensive gynecology* (8th ed.). Elsevier.
9. DeCherney, A. H., Nathan, L., Laufer, M. R., & Roman, A. S. (Eds.). (2024). *CURRENT diagnosis & treatment: Obstetrics & gynecology* (13th ed.). McGraw-Hill Education.