Evidence and Development of an Algorithm in the Management of an 18-year-old woman with Primary Amenorrhoea

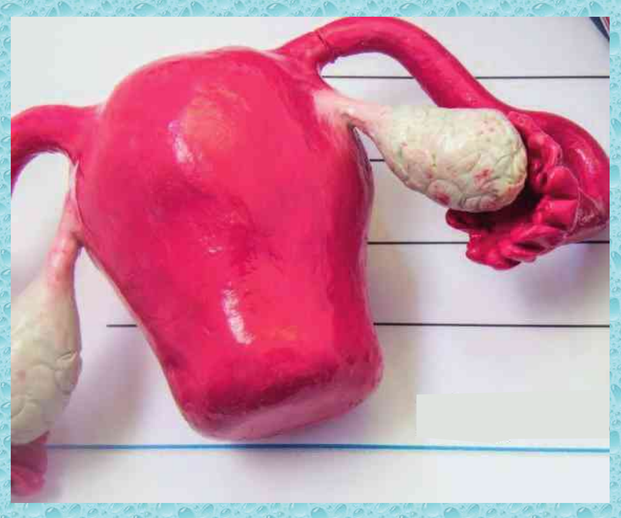
INTRODUCTION:

Primary Amenorrheadefined as failure of menstruation by 15 years of age in presence of normal secondary sexual characteristics or 13 years in the absence of other evidence of puberty. [2]

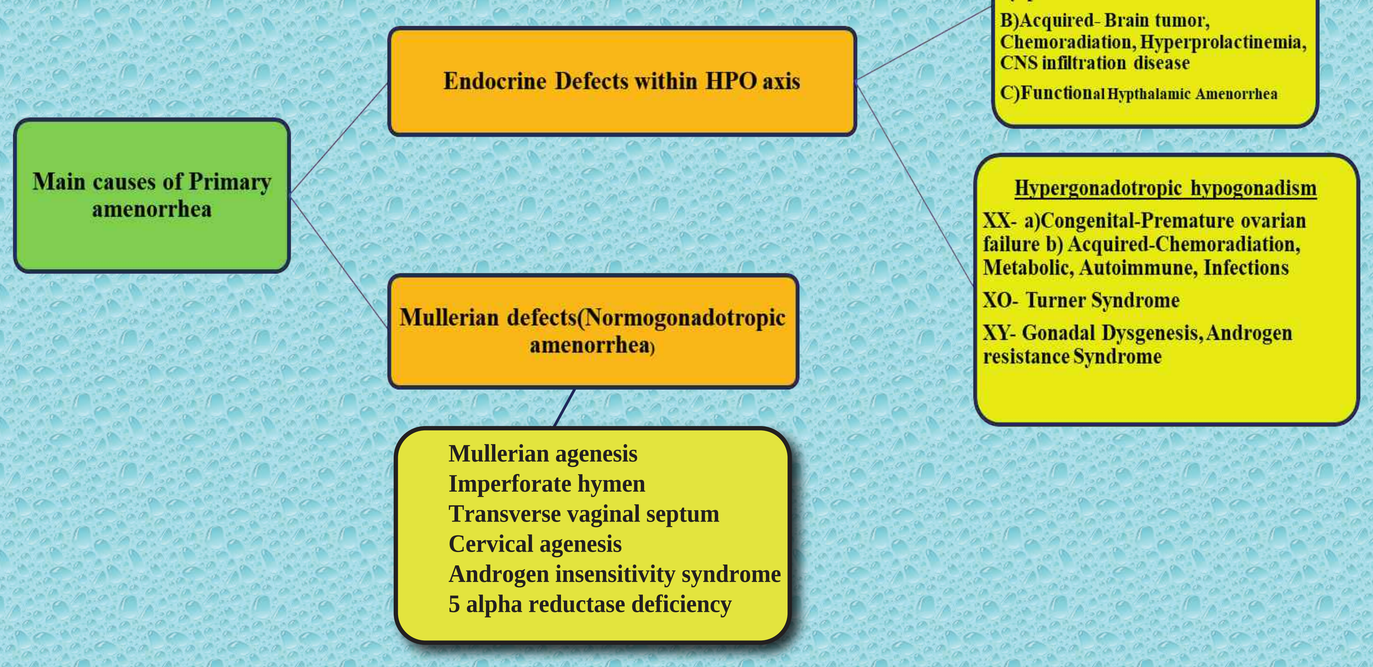
AIM:

This poster aims to highlight the evidence and management of a case of Primary amenorrhea.

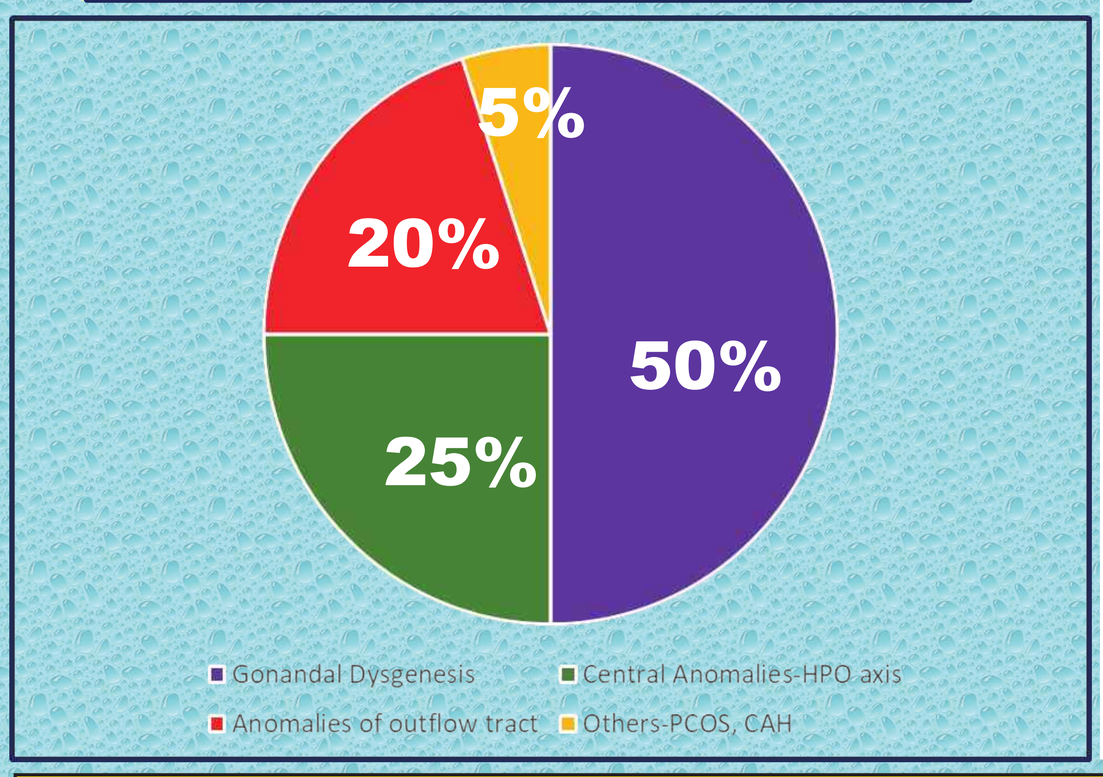
Causes of Primary Amenorrhea [3]



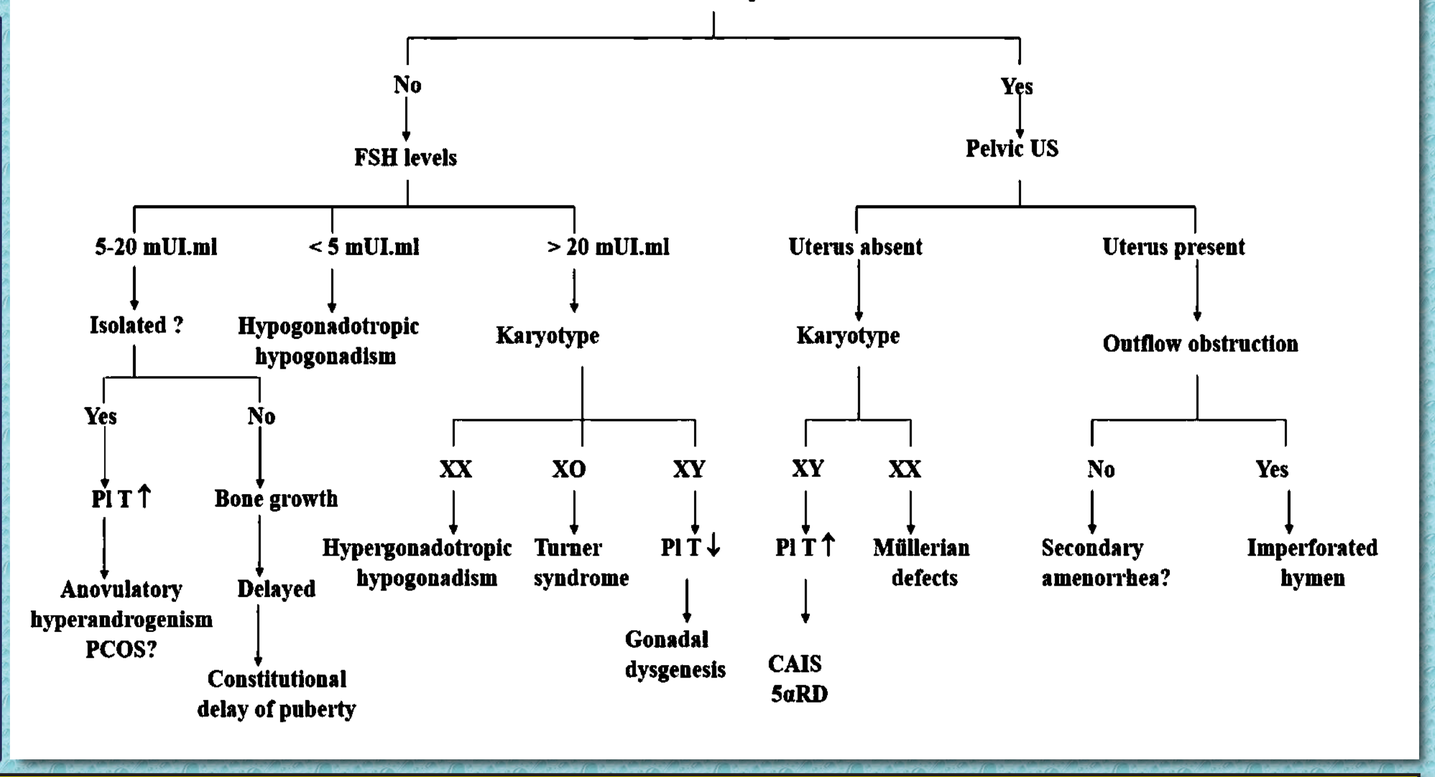




Percentage of the most common causes of primary amenorrhea.[4]



Evaluation of Primary Amenorrhea [1]



Management of Primary Amenorrhea [1]

Depends on treating the underlying causes

A). Hypogonadism replace with estrogen therapy for 6months for uterine growth, secondary sexual characteristics, attain growth velocity and for bone mass. Once bleeding starts to give progesterone therapy (12 14 days per month).

B). Imperforate hymen cruciate incision opens vaginal orifice

C).Transverse septum remove surgically. [6]

D).Mullerian anomalies vaginoplasty and oocytes used for IVF with surrogacy.

E).Androgen insensitivity syndrome/ 5^{α} reductase deficiency/Swyer syndrome testis removal to prevent malignancy.

F).Congenital kallman syndrome ovulation induced with gonadotropins.

G).17^{α} hydroxylase and aromatase deficiency treat with steroids along with estrogen and progesterone.

H). Turner's syndrome growth hormone can be given for short stature. [5]

I). Hyperprolactinemia treat with bromocriptine.

CONCLUSION Needs multidisciplinary approach in complex cases. Delay in diagnosis can cause reduce bone density and long term adverse effects. Timely intervention is required.

References

1.Gaspari,L., Paris,F., Kalfa,N. (2023) ’Primary Amenorrhea in Adolescents:Approach to Diagnosis’. *Endocrines*,4,536-547

2.Klein,D.A., Paradise,S.L., Reeder,R.M. (2019)’Amenorrhea: A Systematic Approach to Diagnosis and Management’ . *Am. Fam.Physician* ,100,39-48

3.Samal,R., Habeebullah,S. (2017) ‘Primary Amenorrhea: a Clinical Review’. I*nt J Reprod Contracept Obstet Gynecol*, Nov:6(11), 4748-4753

4. Courtney, A. Marsh., M.D., MPH., Frances, W. Grimstad., M.D.(2014) ‘Primary Amenorrhea: Diagnosis and Management’. *Obstetrical And Gynecological Survey, Volume 69, Number 10, 603-612*

5. Virginia, P.S., Elizabeth, M.C., (2004)’Turner’s Syndrome’. *N Engl J Med.* 2004;351:1227-38.

6. Opoku, B.K., Kwarteng, R.O., Prempeh,P.A,. (2015)’Transverse vaginal septum with menouria and unilateral renal agenesis-case report’. *Gynecol.* 2015;3:1