

**BACKGROUND**

- Amenorrhea is the absence or abnormal cessation of menstruation, affecting 3-4% of women.
- Primary forms adolescent who has not menstruated by age of 15 or within 3 years of thelarche , secondary forms amenorrhea for 3 months or fewer than 9 cycles.
- Causes include structural, endocrine, genetic, and environmental factors.
- Treatment focuses on correcting defects or hormonal imbalances. Early diagnosis is crucial

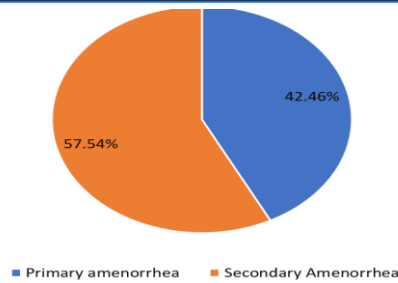
**OBJECTIVES**

- To evaluate etiological factors and management of primary and secondary amenorrhea in adolescent and young women.

**METHODS**

- Prospective Observational study conducted in Department of Obstetrics and Gynaecology, Lucknow over a period of one year.
- Total 117 patients, 12 refused, 24 were excluded due To follow up loss, resulting in 73 enrolments.
- Inclusion criteria- patients with age group 10-24 years,period of amenorrhea > 3 months, patients who gave informed consent for participation in the study.
- Exclusion criteria- history of hysterectomy, pregnancy, patients not giving informed consent.
- Information of the female adolescents and young women were recorded under history ,clinical examination ,laboratory investigations ,imaging and special investigations on a proforma

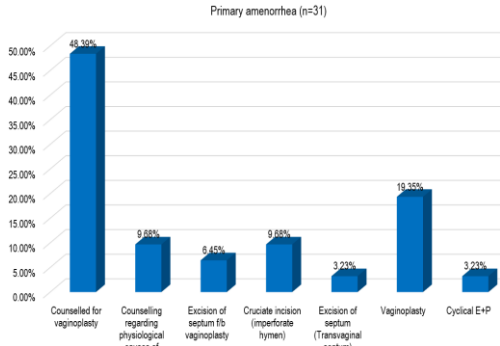
**RESULTS**



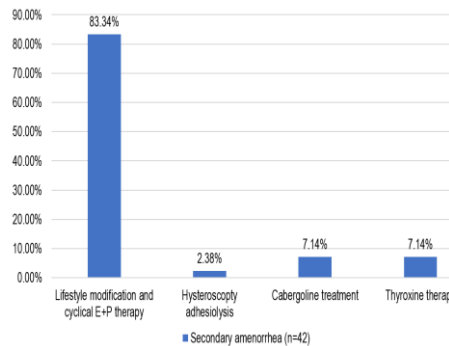
Distribution of primary and secondary amenorrhea cases based on Etiology

Provisional diagnosis	Primary amenorrhea (n=31)		Secondary amenorrhea (n=42)		p-value
	n	%	N	%	
Mullerian agenesis	20	64.52	0	0.00	<0.001**
Mullerian anomaly with TVS	2	6.45	0	0.00	0.345
Imperforate hymen	3	9.67	0	0.00	0.144
AIS	1	3.23	0	0.00	0.878
Turner Variant	1	3.23	0	0.00	0.878
Constitutional delay	3	9.67	0	0.00	0.144
TVS	1	3.23	0	0.00	0.878
PCOS	0	0.00	34	80.95	<0.001*
Hyperprolactinemia	0	0.00	3	7.14	0.356
Hypothyroidism	0	0.00	3	7.14	0.356
Ashermann	0	0.00	1	2.38	0.387
Premature ovarian failure	0	0.00	1	2.38	0.387

- Total 73 adolescent and young women with primary and secondary amenorrhea. Mean age ranged from 10.0 to 24 years, with primary amenorrhea (19.26±3.46), secondary amenorrhea (21.95±1.46) being significantly older.
- Mullerian agenesis was the most common etiological factor in primary amenorrhea, followed by imperforate hymen, constitutional delay, and androgen insensitivity syndrome and Turner variant. Polycystic ovary syndrome was the most common cause in secondary amenorrhea, with hyperprolactinemia and hypothyroidism.
- Premature ovarian failure and Asherman syndrome were the causative factors in 3.23% of cases.



Cases according to type of management in primary amenorrhea (N=31)



Cases according to type of management in secondary amenorrhea (N=42)

**CONCLUSION**

- The study highlights the various etiological factors causing primary and secondary amenorrhea and emphasizes the need for targeted treatment strategies.
- Early identification and management can improve reproductive health, but further research is needed.