



SREE BALAJI MEDICAL COLLEGE & HOSPITAL
CHROMEPET, CHENNAI - 600044



DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY
AND MEDICAL EDUCATIONAL UNIT

Cordially invite you to journal club

PCOS AWARENESS MONTH

**TITLE: Can Shear Wave Elastography
be used as a Diagnostic Marker in
PCOS?**

PRESENTER

Dr Pragya Prem
First year PG
OBG

MODERATORS

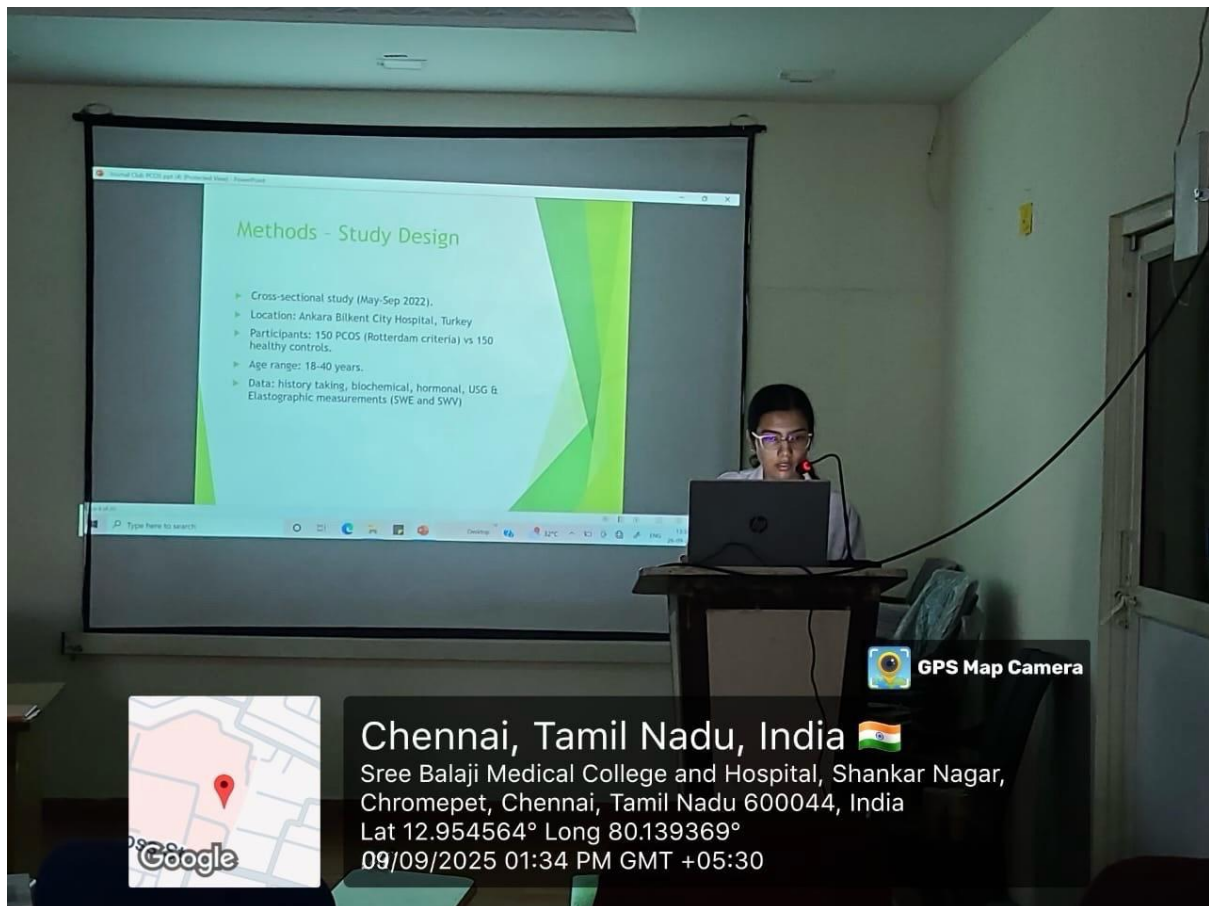
Dr. Nirupa.S
Associate professor
Dept of OBG

Dr. Sindhu RSS
Assistant Professor
Dept of OBG

Date: 9/09/25
Time: 1pm - 3pm
Place: Raman Hal

PROF.DR.SASIKUMAR .P
DEAN,
SBMCH

PROF. DR. MEENA. T. S
HOD
DEPT OF OBG
SBMCH



PRESENTER:

Dr. Pragya Prem

1st year PG

Dept of OBG

SBMCH

MODERATORS:

Dr. Nirupa S (Assc. Prof)

Dr. Sindhu RSS (Asst. Prof)

TITLE : Can Shear Wave Elastography be used as a Diagnostic Marker in PCOS?

JOURNAL NAME: International Journal of Gynecology and Obstetrics

Authors: Uğurcan Zorlu, Sezer Nil Yilmazer-- Zorlu2, Hakan Raşit Yalçın

Published on: 4 August 2025

Institution: Ankara Bilkent City Hospital,

Ankara, Turkey

SUMMARY :

Polycystic ovary syndrome (PCOS) affects 5–10% of reproductive-age women, with features such as hyperandrogenism, menstrual irregularities, infertility, acne, and metabolic disorders. Current diagnosis relies on the Rotterdam criteria (2003), which is subjective and operator-dependent. Shear wave elastography (SWE) is a non-invasive ultrasound technique that measures ovarian stromal stiffness. This was a Cross-sectional study done in May–Sep 2022, Ankara, Turkey. Participants: 150 PCOS women (18–40 years, diagnosed by Rotterdam criteria) vs 150 age-matched healthy controls were taken. Data was collected by anthropometry, biochemical, hormonal profiles, clinical features, USG and SWE and shear wave velocity (SWV) measured using Toshiba Apio 500 ultrasound, with ≥ 10 ovarian measurements per patient. Results showed that Mean SWE was 13.0 in PCOS group vs 9.9 kPa in Control and Mean SWV was 1.7 vs 1.3 m/s. SWE positively correlated with BMI, HbA1c, testosterone, AMH; negatively with SHBG and HDL. SWE and SWV differentiate PCOS from healthy women by detecting increased ovarian stromal stiffness. SWV is a more accurate diagnostic marker. Thus it can be used in early detection, disease severity assessment, treatment monitoring, and future integration into PCOS diagnostic criteria.

