Anti Phospholipid (IgG & IgM) – [Serum] Analysis

Objective

The objective of this test is to detect and quantify anti-phospholipid antibodies (IgG and IgM) in serum. This test is essential for diagnosing antiphospholipid syndrome (APS), a disorder associated with recurrent thrombosis, pregnancy complications, and autoimmune diseases such as systemic lupus erythematosus (SLE).

Materials and Methods

Materials:
- Serum sample from patient
- ELISA kits specific for anti-phospholipid IgG and IgM
- Microplate reader and washing equipment
- Standard laboratory equipment (pipettes, centrifuge)

Methods:
1. Sample Collection: Collect venous blood and separate serum by centrifugation.
2. Antibody Detection: Perform ELISA for IgG and IgM anti-phospholipid antibodies.
3. Quantification: Compare optical density readings to calibrators to determine antibody levels.
4. Interpretation: Elevated levels indicate APS risk and must be correlated with clinical findings and repeat testing after 12 weeks for confirmation.
5. Quality Control: Use kit-provided controls to validate assay accuracy and precision.

Results

- Negative: Antibody levels below cutoff (no evidence of APS)
- Positive: Elevated IgG and/or IgM levels suggest APS; confirm with repeat testing and additional markers (e.g., lupus anticoagulant)
- High titres: Associated with increased risk of thrombosis and pregnancy loss

Conclusion

Anti-phospholipid antibody testing (IgG & IgM) is crucial for diagnosing APS and assessing thrombotic risk. Results should be interpreted with clinical presentation, coagulation studies, and repeated testing for definitive diagnosis.