

P012 PI3K co-stimulation in immuno-reproductive failure.
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INTRODUCTION: The endocrine system and the immune system communicate, regulate, and interact closely during the implantation and maintenance of pregnancy.

PRINCIPLE: Signal communication between the hormonal receptors on the plasma membrane and the intracellular Ca^{2+} reservoir is accomplished by product of phosphatidylinositol metabolism, thus Phosphatidylinositol are involved in all growth and signal transduction and are precursor to many other secondary messengers molecules involved in regulation of cellular activities including the immune-system.

MATERIAL: Five groups of healthy women (18-35 yrs) were used. 20 Spontaneous aborters, 20 primary, 20 secondary infertile women (TEST GROUP) while, 20 pregnant, 20 multiparous women (CONTROL GROUP).

LABORATORY ANALYSES:
1. Pi3k assay (by Elisa technique), **2.** Antiphospholipid antibodies test (by Elisa technique) **3.** Antithyroid antibody test (thyroglobulin and thyroperoxidase) by Elisa technique. **RESULT:** 60% of the Test group has high Pi3k values while 80% of the control group falls within the normal range. After 140 days the Abortion rate among the high Pi3k values was 63.9% while the abortion rate among the normal patient (control group) was 15.6% this is statistically significant $p < 0.001$ (as a result of antibodies).

CONCLUSION: Increase in PI3K values, mostly resulted to autoimmune disorders and can serve as a useful marker for cases with immuno-reproductive failure.