

Table 3: Comparison between IFN γ /IL-10 ratio of the three groups (ANOVA test analysis).

Variable	Group	Mean \pm SE	F test P value	Sig. between Groups	
				groups	P value
IFN γ /IL-10 (ELISA)	A	630.8 \pm 263.8	<0.05	A–B	0.068 ^a
	B	2.9 \pm 0.3		A –C	0.066 ^a
	C	0.02 \pm 0.002		B –C	0.000**

^a =marginally significance (0.05< p <0.1);** =highly significance difference (p <0.001)

IFN- γ and IL-8 expression, showed a significant correlation (p <0.05) between them in group A and group B by using ELISA technique, whereas the result revealed that there was no significant

correlation (p >0.05) between IFN- γ and IL-8 expression in control (group C), (Table 4) .

Table 4: Relation between the mean percent of IFN- γ and IL-8 in serum in group A, B and C.

IFN- γ – IL-8		Correlation Coefficient r =	P value
groupA	ELISA–ELISA	0.279	<0.05
groupB	ELISA–ELISA	0.501	<0.05
groupC	ELISA–ELISA	-0.629	>0.05

Discussion

The current study, showed a highly significant difference in expression of IL-10 (systemic) (p <0.001) between first; second trimester abortion and control groups (successful pregnancy).In addition, no significant difference in expression of IL-10 (systemic) (p >0.05) between first trimester and second trimester abortion. These results agreed with other studies that found higher concentrations of IL-10 at delivery than during any other stage of gestation tested, though the reasons for this and its significance were not readily understood⁽²¹⁾. Moreover, this study, showed that the expression of

IL-10 proteins in circulation of women with successful pregnancy (group C) was significantly higher (p <0.001) than that of women with RSA (group A) and higher than that in women with non-RSA (group B).this result indicated the systemic immune response might be associated with local cytokine milieu at the fetomaternal interface. This significantly higher level of IL-10 with successful pregnancy in this study, could be explained by previous study that showed that IL-10 production was significantly lower in patients with recurrent miscarriage as compared with normal pregnancy or spontaneous