

**Table 1: Biochemical parameter values in the pre- and post menopausal women**

Parameters	Pre-menopausal	Post-menopausal
Age (years)	33.95±7.9	59.9±7.2
BMI (Kg/m <sup>2</sup> )	26.66±4.86	28.58±4.78
WC (cm)	80.6±10.0	89.53±12.00*
TC (mg/dl)	178.3±21.3	207.5±34.4*
TG (mg/dl)	126.3±39.3	140.9±55.8
HDL-c (mg/dl)	53.3±6.0	47.02±6.9*
LDL-c (mg/dl)	99.0±24.7	132.12±34.65*
AI	1.9±0.7	3.00±1.14*
LH (pg/ml)	6.6±2.3	41.58±11.64*
FSH (pg/ml)	7.2±2.2	55.39±12.54*
E <sub>2</sub> (pg/ml)	190.7±48.1	56.46±15.48*
OX-LDL (U/l)	57.8±22.3	79.85±35.29*

\*  $p \leq 0.05$ 

In table 2 the comparison between different BMI subgroups of the pre-menopausal group showed a significant increase in BMI, WC, TG and ox-LDL ( $P < 0.01$ ) with significant decrease in HDL-C in

the obese subgroup as compared to the normal or overweight women, but no significant changes in the other parameters (TC, LDL-C and sex hormones) could be seen.

**Table 2: The biochemical parameter values in the BMI subgroups of the pre-menopausal women**

Parameters	Premenopausal > 25 (kg/m <sup>2</sup> )	Premenopausal 25-29.9 (kg/m <sup>2</sup> )	Premenopausal > 30 (kg/m <sup>2</sup> )
Number	13	13	11
Age (years)	30.23±8.39	35.23±6.7	36.82±7.6
BMI (kg/m <sup>2</sup> )	21.67±1.7	26.72±1.53	32.5±2.96*
WC (cm)	70.62±4.65	81.38±5.41	91.27±6.81*
TC (mg/dl)	170.92±21.35	180.15±19.26	184.73±22.67
TG (mg/dl)	103.46±23.81	117.69±29.47	163.45±39.24*
HDL-c (mg/dl)	56.23±4.4	53.54±5.16	49.45±6.73*
LDL-c (mg/dl)	93.92±25.0	100.77±23.42	102.82±26.95
AI	1.7±0.59	1.93±0.6	2.16±0.84
OX-LDL(U/l)	44.61±17.55	57.82±14.29	73.91±25.71*
LH (pg/ml)	7.02±2.44	6.33±2.26	5.12±2.22
FSH (pg/ml)	8.33±1.99	6.78±2.22	6.44±2.1
E <sub>2</sub> (pg/ml)	209±30.56	192.31±51.2	166.54±54.15

 $p < 0.01$  by ANOVA test

The comparison (by ANOVA test) between different BMI subgroups of the postmenopausal group showed a gradual significant increase in age, BMI and WC. In

addition, the obese women of this group had a significant elevation in serum TC, LDL-C, AI and ox-LDL-C ( $p < 0.01$ ) with a significant reduction in HDL-C ( $p < 0.01$ ).