

## Correlation of Serum Leptin levels with Body Mass Index and Gender

**Khan, Tabassum, Tanvir; Mohd, Muzaffer, Ali, Khan; Mohd, Inayatulla, Khan;**

*Khan Tabassum Tanvir, Associate Professor of Physiology, Jizan Medical College University, Jizan. Kingdom of Saudi Arabia.  
Email: [drktt\\_786@yahoo.co.in](mailto:drktt_786@yahoo.co.in)*

### Abstract

**Background:** With recent discovery that adipocyte derived hormone Leptin regulating the appetite and energy expenditure in the body has made researchers interested in finding out the relationship of serum Leptin levels in comparison with BMI and Gender. Our objective was to evaluate the correlation between Serum Leptin levels and Body Masss Index [BMI] and gender. **Methods:** This cross sectional study was carried out at Govt Medical College Aurangabad, India. Serum leptin levels of 40 males and 40 females were measured. Their Height, Weight were measured according to standard protocol and BMI was then calculated for each individual. **Results:** The Average BMI in males was  $25.17 \pm 2.87$  and Average S. Leptin levels were  $10.19 \pm 3.18$  and Average BMI in females was  $25.31 \pm 2.92$  and Average S. Leptin levels were  $19 \pm 0.67$ . The values of S. Leptin levels were found to be higher in females and the calculated p value was significant. There was significant strong correlation between serum leptin levels and BMI in both males and females. **Conclusions:** Serum Leptin levels were found to be more in females as compared to males. The serum Leptin levels were strongly positively correlated with BMI in both males and females.