Obese adolescents had the mean ALT as 25.34±13.44, and the mean AP was 143.63±83.69, but this is not statistically reliable (p>0.05). The mean ALT of adolescents without obesity was 18.87±13.26, and the mean AP was 165.76±99.01 (p>0.05).

Conclusion We report that obese adolescents had higher levels of ALT and lower levels of AP in their serum, and less diverse gut microbiome communities with higher relative abundance of main bacteria phyla like Firmicutes, Bacteroidetes, Actinobacteria.