EVALUATING THE VARIATIONS AND CORRELATIONS BETWEEN LDL WITH OTHER BIOCHEMICAL PARAMETERS IN PATIENTS OF DIFFERENT PHYSICIANS REFERRING TO CLINICAL LAB DURING SEASONS

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Abstract:
The influence of lipids on blood and plasma viscosity has not been fully elucidated An excess of weight including *obesity have reached epidemic rates in all age groups, both in developed and developing countries. Biochemical Parameters maybe has relation with each other. This research aimed to study of relation between LDL with other biochemical parameters. For this study 1000 data about these experiments was collected from private laboratory in Ilam city. The data classified by disease, age, sex and season. The data analyzed with SPSS software version 19 and used of various test such as. This study indicated that LDL has significant relationship with season, TG, cholesterol and HDL. And also we find this study shown that LDL has significant and direct relationship with season. For better result about relationship of biochemical parameter with each other we suggest that this study done in different area and analysis all of result and find the relationship.*
Key words: *LDL, Biochemical Parameters, Seasons, Ilam.*

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INTRODUCTION:

The influence of lipids on blood and plasma viscosity has not been fully elucidated An excess of weight including obesity have reached epidemic rates in all age groups, both in developed and developing countries. Dyslipidemia, characterized by altered circulating levels of blood lipids nd/or lipoprotein concentrations, has a genetic or environmental etiology [1, 2]. The causal relevance of low-density lipoprotein cholesterol (LDL-C) in coronary disease has been established by numerous trials of LDL-C-lowering interventions [3, 4]. Experimental and epidemiological studies indicate an association between dietary saturated fatty acids and thrombosis, but the effects of individual fatty acids on homeostasis are still controversial [5, 6, 7]. Hematologic parameters have prognostic importance in cardiovascular disease. However, the relation between atherosclerosis progression and hematologic parameters is not well defined [8, 9]. CHD is coronary heart disease that caused by more than 250 different factors such as age, sex, blood pressure, diabetes, glucose disorders and fat disorders such as LDL disorders [10-12]. Other study indicated that change in concentration of LDL_C and HDL has most effect in arthrosclerosis and LDL_C is first factor for prediction of arthrosclerosis. LDL is most important lipoprotein in arthrosclerosis [13-15]. Additionally, platelets, red blood cells (RBCs) and hemoglobin are associated with cardio respiratory conditions [16, 17]. Actually, LDL is a lipoprotein that can very important in diagnosis of much disease and so maybe has relation with other biochemical and hematological factors and by this factors can control LDL or predict many of disease [18, 19]. Actually all of study in this field does not descript the relationship between LDL and other biochemical and hematological factors, however just one study indicated an association between the lipid and hematological profiles and body adiposity in obese adolescents [20]. This study aimed to verify the relationship between the LDL and hematologic and biochemical profiles.

MATERIALS AND METHODS:

As this study aimed to verify the relationship between the LDL and hematological and biochemical profiles, thus, 1000 data about this experiments was collected from private laboratory in Ilam city. The data classified by disease, age, sex and season.
*Data analysis:* The data analyzed with SPSS soft ware version 18 and used of various test such as [21-23].
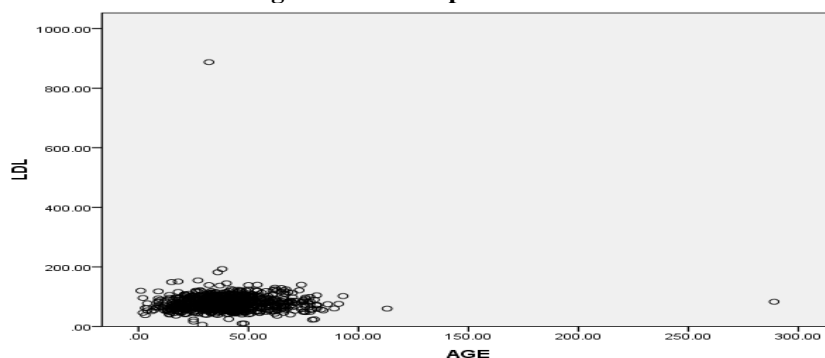
RESULT:

This study indicated that LDL has significant relationship with season, TG, cholesterol and HDL. And also we find this study shown that LDL has significant and direct relationship with season. Amount of LDL has decreasing trend in seasons and this amount in winter was more than autumn, in spring this is in highest level. The highest mean of LDL was in person who referred from lung specialist doctors 83 people, and the lowest of its was in person who examine by personal request, 71 people.
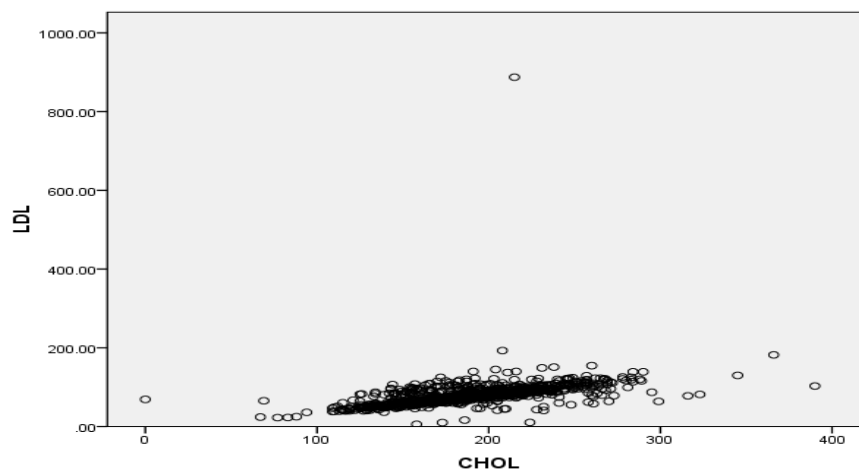
Fig 1: Relationship LDL with Cholesterol
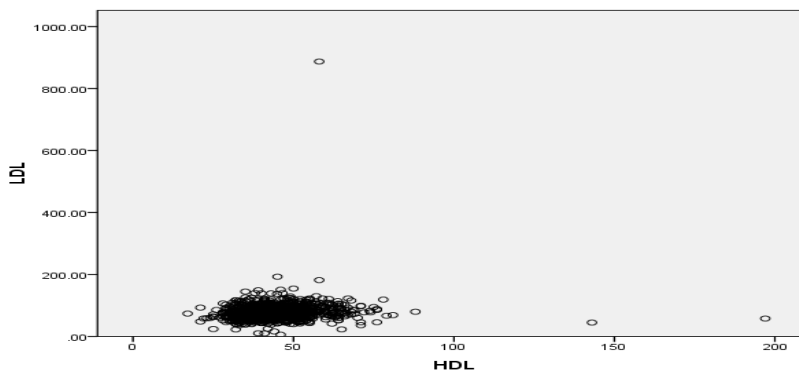
Fig 2: Relationship LDL with HDL

Fig 3: Relationship LDL with age.

DISCUSSION:

This research aimed to study of relation between LDL with other biochemical parameters, seasons, sex and physicians who referring them. According to the obtained result and result of analysis, LDL has a significant relationship with seasons, physicians, TG and cholesterol. The mean of LDL in spring was in highest level while expected that winter have it, because of Consuming fatty foods in this season. But perhaps this is due to the holiday of Nowruz and the extensive and long-term recreation of the people and cholesterol changes in spring confirm this matter so that highest rate of its was in this season. Different studies shown that biochemical parameters had relationship with disease for example in one research indicates that LDL has significant relationship with coronary disease while recent study indicated that mean of LDL who referring from heart specialist was equals with person who exanimate by personal request [24-27], and also lowest level of cholesterol was in person who referring from heart specialist. This topic rejects many of study. Recent study indicated that level of LDL has direct relationship with season. One of study on rates has been done that shown the season has relation with some of biochemical parameter and also indicated that count of RBC, hemoglobin, MCHC and MCH has increased in winter and temperature was most effective factor on count of RBC [28, 29].

CONCLUSION:

Recent research indicated the opposite of this result. Almost all of person who examine by personal request was healthy people but result of this research shown that high level of TG and low level of LDL was in this people. For better result about relationship of biochemical parameter with each other we suggest that this study done in different area and analysis all of result and find the relationship.

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