Lipids pattern in thalassaemia

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Thalassaemia is a condition in which there is a reducedrate of synthesis of one or more of the globin chainsleading to imbalanced globin chain synthesis, defectivehaemoglobin production. and damage to the red cells or theirprecursors from the effects of the globin subunits that areproduced in excess.The present study is a modest attempt to evaluate thelevels, structure and composition of liporoteins frompatients with beta thalassaemia major in comparison withpatiehts with iron deficiency anaemia and/or healthychildren.Our study included (17) ~ thalassaemic patients ageranged (8) years, (12) iron deficiency anaemia patients withmean age range (2) years and also (10) age and sex matchedchildren, with mean age range (8) years, were included as acontrol grOUp,patients and controls were subjected toHaemoglobin percentage- Red blood corpuscles countHb electrophoresisSerum triglycerides- Serum cholesterol- Serum VLDL.Serum LDLSerum HDL-C- Serum apolipoprotein A1Serum apoliprotein BWe concluded that the hypertriiglyceridaemia. increasedVLDL. hypocholesterolaemia. decreased LDL. HDL and apo-A1inanaemic children IThalassaemia and iron deficiency) may bedue to:* Diluting effect of the increased plasma volumeaccompanying anaemia.* Abnormalty in the biosynthesis and excretion* Increased lupid consumption by red cell formation.* Decreased lipoprotein synthesis* Abnormalities in destribution of lipidslipoproteins.* Destirbance in the formation of lipoprotein lipose enzyme.in plasma* and/or liver desfunction associated with anaemia.