

SUMMARY AND CONCLUSION

Some of the health problems that exist in developing countries are relevant to socioeconomic problems, endemic diseases, traditions in dietary habits, one of these health problems is kwashiorkor which is protein energy malnutrition. Therefore, in this presentation we planned to evaluate the biochemical changes in lipid metabolism and liver span by ultrasonography in kwashiorkor children before and after nutritional treatment.

The study included 20 children of both sex with their age ranging from 7-30 months and their weight ranging from 4.5-9.5kg classified into mild, moderate and severe cases and they serve as their own control.

Serum samples were obtained from each case before and after one month of treatment. The following biochemical parameters were determined: Total lipids, cholesterol, triglycerides, α -lipoprotein and B-lipoprotein as well as liver span by ultrasonography. All the previous was done also after nutritional treatment for 1 month. The results were statistically analysed and with each case serving as his own control. Our results showed highly significant decrease ($P < 0.01$) in total lipids, triglycerides, cholesterol, α -lipoprotein and B-lipoprotein and highly significant increase in liver size. After nutritional treatment with high protein diet we found highly significant increase ($P < 0.01$) in total lipids, triglycerides, cholesterol, α -lipoprotein and B-lipoprotein and highly significant decrease in liver size.

Finally by assessing the results of all parameters obtained, it is quite obvious that kwashiorkor plays a major role in lipid metabolism in infants and

young children, simultaneous determination of lipid constituents in serum of kwashiorkor subjects might help in assessing the severity of the condition and evaluating the prognosis of the individual case. Also, it has been suggested that in the correction of malnourished subjects, there is no need for fortification of preadmission diet with extrafat than normal constituent of diet as this might contribute to the hastening of their recovery.