SUMMARY AND CONCLUSION
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The study was carried out to know the lipid lipoprotein profile in children of different age group and cord blood of newborn, with the aim of noting the prevalence of hypercholesterolemia or hypertriglyceridemia in children.

A total of 114 normal subjects (77 males and 37 females, age group 0-16 years) residing in and around medical college campus and Maine garh, sub-urban area of Jhansi, as well as cord blood of newborn (n=16) delivered in department of Obstetrics & Gynaecology, M.L.B. Medical College, Jhansi, were included in this study.

Fasting lipoprotein fractions (STC, STG, HDL-C, VLDL, LDL-C) were estimated after taking detailed history and clinical examination in each child and also noted cord blood lipoprotein fractions of newborns. The subjects were divided into six groups as follows – Group A (cord blood n = 16), Group B (0-1 year, n=10), Group C (2-5 year, n=21), Group D (6-8 year, n=23), Group E (9-12 year, n=33) and Group F (13-16 year, n=27).

The study showed the mean lipoprotein fractions in the cord blood (Group A) as STC (31.28 ± 4.40), STG (32.31 ± 5.04), HDL-C (15.53 ± 0.69), VLDL (6.6 ± 1.03), LDL-C
(59.15 ± 4.46). The values being far lesser than the corresponding figures in the rest of the subjects group studied (Group B, C, D, E & F).

In the 0–1 year age (Group B) the values were STC (175.22 ± 3.23), STG (81.72 ± 1.76), HDL-C (31.77 ± 0.74), VLDL (16.47 ± 0.51) & LDL-C (126.98 ± 3.0) while in group C the corresponding figures were - STC (181.52 ± 11.36), STG (79.19 ± 10.28), HDL-C (32.42 ± 1.56), VLDL (15.83 ± 2.09), & LDL-C (124.08 ± 12.50). The difference in lipoprotein fraction in either group were statistically insignificant (P > 0.05). Group D, E & F also showed a lipoprotein pattern which was similar to that of group A & C. The inter-group difference were statistically insignificant.

The LDL/HDL ratio remained more or less stationary with no significant difference between different groups (Group A - 3.81 ± 0.37), B (3.99 ± 0.16), C (4.10 ± 0.33), D (3.99 ± 0.19), E (3.87 ± 0.43), F (3.83 ± 0.19).

The study showed that the majority of children (78.07%) had a STC level between 170–199 mg% (NCEP borderline group) while 21.93% children showed the STC below 170 mg% and none had STC above 200 mg%. Also none of the subjects had hypercholesterolemia while comparing the lipoprotein fraction with respect to sex, we found no significant difference in various lipoprotein fractions between either sex in different age group.
On comparing the effect with respect to socio-economic status, the lipoprotein pattern showed numerically higher value in middle socio-economic group as compared to lower socio-economic group but the difference was insignificant.

So it may be concluded that lipid lipoprotein profile remain more or less stationary throughout childhood. While cord blood lipoprotein level were far lesser than that of children. Study failed to notice any significant effect of gender and socio-economic status on lipid lipoprotein profile. Though none of the subjects had hypercholesterolemia/hypertriglyceridemia. Majority of children had borderline (170-199 mg%) cholesterol level.