

non-elderly and 2.66 in elderly was lower than our 3.29, and their TG/HDL of 1.73 and 1.46 was significantly lower than our mean of 3.89 [25]. Another study gave a similar finding of high LDL and low HDL as the common most lipid abnormalities in stroke patients, with high TG was a feature of ischemic stroke as compared to hemorrhagic stroke [26]. However, their triglycerides levels were significantly lower than our study population. The rest of the lipid markers were in close range with our mean values.

A nation-wide cohort survey conducted in Korea linked the mildly abnormal lipid levels with less variability also associated with myocardial infarction and stroke, even in the young population with statin use [27]. This study had mean TC levels of 188 and mean HDL 56 (higher than our study), while mean LDL of 108 and mean TG of 104 (lower than our study). Another study compared lipid markers in ischemic stroke by gender and found females had higher total cholesterol and LDL than males [28]. This finding was again contrasting to our results with no lipid marker was indifferent with respect to gender except for higher TG/HDL ratio in males (which was also statistically insignificant). Lastly, a study conducted in Cameroon in newly diagnosed stroke patients showed low HDL,

with high LDL/HDL and TC/HDL ratios [29]. The mean HDL reported in the study was similar to our reported values (37 vs. 36), LDL/HDL was reported 4.0 which was higher than our reported value of 3.29, and mean TC/HDL 5.9 which again was higher than our mean value of 4.89 [29]. All the above markers were found higher in female stroke patients, which was contrasting to our results. Similarly, ischemic stroke patients had a higher HDL (46 vs. 36) and a higher TG (185 vs. 134) than our study and a lower LDL (118 vs. 88) without any gender discrepancy.

CONCLUSIONS

Despite the utilization of statins, frequent derangements of lipid markers are reported in acute stroke patients of our study. The pattern of those derangements were similar to previously reported studies. LDL/HDL ratio was the most prominently deranged lipid marker in our study results. However, the differences of lipid markers among gender was not found in our study which was evident in previous literature. Hence, further exploration is required in to the usage of lipid lowering drugs and its protective mechanisms for stroke.



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