



ORIGINAL RESEARCH PAPER

General Medicine

A CROSS SECTIONAL STUDY OF LIPID PROFILE IN NON DIABETIC STROKE:IN TERTIARY CARE HOSPITAL SOUTH GUJARAT

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ABSTRACT

This study is to evaluate lipid profile in non diabetic stroke :In tertiary care hospital South Gujarat.

INTRODUCTION

Stroke is most common cause of death in the developed world after cancer And ischemic heart disease and it is most common cause of physical disability . Stroke represents the third most common cause of death in developed Countries. Stroke is a common medical emergency .The Incidence is rising steeply in many developing countries because of adoption of less healthy life styles. It is difficult to treat and the treatment is still Not effective . Prevention is best option but ability to forecast the stroke is challenging making the detailed study of risk factors essential. The risk factors include diabetes , hypertention , dyslipidemia , atherosclerosis , age , smoking and other Rare Causes . there is evidence that modification of risk factor will reduce the risk of the stroke . Recent studies have shown that elevated levels of serum lipids are important risk factor for development of atherosclerosis which is the precursor of stroke so aggressive treatment of dyslipidemia will decreases the risk of stroke - the amount of evidence relating to relation between serum Lipids , lipoproteins and cerebrovasular accidents is less clear , the meager reports are available in indian patients who have different social , living and dietary habits compared to western population . Hence The study being taken to study lipid abnormalites in non Diabetic Stroke patients in our Setup.

STUDY DETAILS : All the stroke patients who will All patients with stroke who are non diabetic and age above 18 year with ischemic or hemorrhagic stroke in CT scan; will be enrolled in study. Patients with DM , Patients on drugs for dyslipidemia , Patients on dietary modification for dyslipidemia .Cerebral infract associated with trauma or tumour.age below 18 years. information of stroke patients admission will be obtained from indoor registration book of each medicine ward and ICU .Detailed history taking and clinical examination will be done along with necessary investigations.appropriate imaging (NCCT Brain) for evidence will be performed.

Collected data has been entered in the excel data sheet and data analysis has been done with the help of Epi. Info.7.2 software.

Pronged age group 75 years respectively. Mean age was 48.3 years with 14.8 SD. Study

Present study found that 4%, 21%, 41%, 34% participants

were belonged to age group 18-30, 31-45, 46-60, >60 years respectively. The mean age was 59.6 years with 9.4 SD and 63% & 37% participants were male and female respectively. Around 58%, 76%, 33%, 34% participants had risk factor/ comorbidity like HTN, Smoking, Alcoholics, Family H/O stroke.

Almost 63% participants noted with ischemic stroke and 37% with hemorrhagic stroke. Almost 60%, 29%, 11% participants had S. cholesterol level <200, 200-240, >240 mmHg respectively. Mean S. Cholesterol level was 216.5 mg/dL with 36.8 SD. Around 30.2%, 12.7%, 57.1% participants of ischemic stroke group and 56.8%, 16.2%, 27.0% of hemorrhagic stroke group have noted with TC level <200, 200-240, >240 mmHg respectively (p<0.05). Almost 52, 33%, 15% participants had S. Triglyceride level <150, 151-199, >200 mg/dL respectively. Almost 30.2%, 46%, 23.8% participants of ischemic stroke group and 51.4%, 29.7%, 18.9% of hemorrhagic stroke group have noted with STG level <150, 151-199, >200 mg/dL respectively (p>0.05). Almost 47%, 21%, 16%, 16% participants had LDL level <100, 101-130, 131-160, >160 mg/dL respectively. Mean LDL level was 118.9 mg/dL with 37.4 SD. Almost 22.2%, 14.2%, 23.8%, 39.7% participants of ischemic stroke group and 43.2%, 24.3%, 16.2%, 16.2% of hemorrhagic stroke group have noted with LDL level <100, 101-130, 131-160, >160 mg/dL respectively (p<0.05). Almost 53%, 47% participants had HDL level <40, ≥40 mg/dL respectively. Mean HDL level was 43.8 mg/dL with 15.8 SD. Almost 14.2%, 85.8% participants of ischemic stroke group and 35.1%, 64.9% of hemorrhagic stroke group have noted with HDL level <40, ≥40 mg/dL respectively (p<0.05). 56%, 44% participants had VLDL level ≤30, >30 mg/dL respectively. Mean VLDL level was 29.6 mg/dL with 7.4 SD. Almost 33.3%, 66.7% participants of ischemic stroke group and 56.8%, 43.2% of hemorrhagic stroke group have noted with VLDL level ≤30, >30 mg/dL respectively (p<0.05). Highest number of participants were noted in 46 to 60 years age group (41%) followed by more than 60 years group (34%). Average age of study participants was almost 60 years. Male:female ratio was 1:0.6. Smoking (76%) was the most common risk factor noted among study participants followed by HTN (58%). almost 3/5th (63%) participants had noted with ischemic stroke and remaining had hemorrhagic stroke. Almost 40% participants were noted with higher cholesterol level, out of that almost 27% have much higher cholesterol level. Mean cholesterol level was 216.5 mg/dL. Highest number of study participants (57.1%) of ischemic

group had statistically significantly extremely higher level of total cholesterol where in hemorrhagic group, the TC level was normal in more than half study participants. Almost 48% participants were noted with higher serum triglyceride level, out of that almost 31% have much higher serum triglyceride level. Mean serum triglyceride level was almost 157 mg/dL. Highest number of study participants (69%) of ischemic group had higher level of STG where in hemorrhagic, the STG level was normal in more than half study participants but it was statistically not significant. Almost 53% participants were noted with higher serum LDL level, out of that almost 30% have much higher serum LDL level. Mean serum LDL level was almost 119 mg/dL. Almost 80% study participants of ischemic group had statistically significantly more than normal & almost 40% had extremely higher level of LDL where in hemorrhagic group, the LDL level was normal in almost 45% and higher in almost 55% study participants. Almost 53% participants were noted with lower serum HDL level. Mean serum HDL level was almost 44 mg/dL. Almost 14% study participants of ischemic group and 35% of hemorrhagic group had statistically significantly lower level of HDL. Almost 44% participants were noted with higher serum VLDL level. Mean serum VLDL level was almost 29 mg/dL. Almost 67% study participants of ischemic group and 43% of hemorrhagic group had statistically significantly higher level of VLDL.

CONCLUSION

Present cross-sectional study conducted among 100 cases of non-diabetic stroke diagnosed and admitted at the government medical college, Surat, Gujarat, India with aim to study of lipid profile in the non-diabetics with stroke.

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