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# A Study of Lipid Profile of 100 Patients Presented With Myocardial Infarction \& Stroke, a Recent Concept 

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## Driginal Research Article

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#### Abstract

In the historical era, till now total cholesterol and LDL was considered to be a potential risk factor for MI and CV stroke. So we conducted a study of 100 cases of myocardial infarction and stroke at tertiary care center, surendranagar. In this case study, total cholesterol and LDL level were measured. Male (71\%) had higher incidence than female (29\%) in myocardial infarction and stroke. Lipid profile was altered in $37 \%$ of patients which means $63 \%$ had normal lipid profile. 100 cases of myocardial infarction and CV stroke were studied for their lipid profile to find out whether cholesterol levels are risk factor for arterial disease or not. It's to prove that nowadays total cholesterol and LDL is no longer considered to be a risk factor for myocardial infarction and cerebrovascular accidents. In this study, Trop-T and lipid profile of patients having MI \& stroke taken by fully automated machine. Study excluded the patients which were already having statins for high cholesterol levels. In this study male(71\%) have higher incidence of MI than female (39\%).and Age group(56-70yr)have a higher incidence of myocardial infarction and stroke. Total cholesterol was normal in $71 \%$ and abnormal in $29 \%$, And LDL was normal in $69 \%$ and abnormal $31 \%$.in $90 \%$ of MI cases ( $74 \%$ normal and $36 \%$ abnormal lipid profile) and in $10 \%$ of cases of brain stroke ( $6 \%$ normal and $4 \%$ abnormal lipid profile). At the end of study there is no positive correlation between lipid profile and myocardial infarction \& stroke.


Keywords: MI, stroke, total cholesterol, LDL, stroke.

## INTRODUCTION

In the historical era and till now total cholesterol and LDL was considered to be a potential risk factor for MI and CV stroke [1, 5].

- So we conducted a study of 100 cases of myocardial infarction and stroke at tertiary care center, surendranagar.
- In this case study, total cholesterol and LDL level were measured.
- Male (71\%) had higher incidence than female (29\%) in myocardial infarction and stroke. Lipid profile was altered in $37 \%$ of patients and $63 \%$ had normal lipid profile [1].
- Academics and cardiologists from 17 countries reviewed 19 previous studies, involving 68,000 people [6].
- They found no link to heart disease and LDL cholesterol - but there were hints that those with higher levels survived longer [6].
- But now a day there is no positive correlation between MI and stroke with lipid profile.


## EXPERIMENTAL SECTION/MATERIAL AND METHODS

- In this study, trop-T and lipid profile of patients having MI \& stroke taken by fully automated machine.
- Trop-T level fully automated (cobas 411) electrochemi luminescent immunoassay and lipid profile (direct enzyme method) on DADE dimension Xpand fully automated analyzer machine.
- Study excluded the patients which were already having statins for high cholesterol levels.


## RESULTS AND DISCUSSION

- In this study male(71\%) have higher incidence of MI than female(39\%).and Age group(56-70yr)have a higher incidence of myocardial infarction and stroke.
- Total cholesterol was normal in (71\%) and abnormal in (29\%), and LDL was normal in (69\%) and abnormal ( $31 \%$ ). In $90 \%$ of MI cases 74 was normal and 26 was abnormal lipid profile and in
$(10 \%)$ of cases of brain stroke 6 was normal and 4 was abnormal lipid profile.
- In previous era there is correlation of total cholesterol and LDL level with MI and cvs stroke. But now a days that is proven that the there is no positive correlation between total cholesterol and lipid profile with MI and CVS stroke. In my study Total cholesterol was normal in (71\%) and abnormal in ( $29 \%$ ), and LDL was normal in ( $69 \%$ ) and abnormal $(31 \%)$. In $90 \%$ of MI cases 74 was normal and 26 was abnormal lipid profile and in ( $10 \%$ ) of cases of brain stroke 6 was normal and 4 was abnormal lipid profile.
- So the study suggestive that "There is no positive correlation of total cholesterol and LDL level with MI and CVS stroke".

In previous year same study done by author kronmal RA, kosinski AS, Mock MB Ann Epidemiol. 1992 Jan-Mar; 2(1-2):129-36[3].

- Statins 'may be a waste of time': Controversial report claims there's NO link between 'bad cholesterol' and heart disease by ben spencer medical correspondent for the daily mail [2].

Table-1: Sex wise distribution

| Sex | In \% |
| :--- | :--- |
| Male | $71 \%$ |
| Female | $29 \%$ |

Table-2: Age wise distribution

| Age in (year) | Male | Female |
| :--- | :--- | :--- |
| $10-24$ | 00 | 01 |
| $25-40$ | 15 | 04 |
| $41-55$ | 15 | 02 |
| $56-70$ | 35 | 13 |
| $71-85$ | 05 | 09 |
| $86-100$ | 01 | 00 |
| TOTAL | 71 | 29 |

Table- 3: Cholesterol level of 100 cases

|  | UP TO 130 <br> $\mathrm{mg} / \mathrm{dl}$ | $130-159$ <br> $\mathrm{mg} / \mathrm{dl}$ | $160-189$ <br> $\mathrm{mg} / \mathrm{dl}$ | $>190$ <br> $\mathrm{mg} / \mathrm{dl}$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LDL | 69 | 27 | 01 | 03 | 100 |
| Total chole | Value in $\%$ |  |  |  |  |
| Normal | $71 \%$ |  |  |  |  |
| Abnormal | $29 \%$ |  |  |  |  |

Table-4: LDL level of 100 cases

|  | UP TO 130 <br> $\mathrm{mg} / \mathrm{dl}$ | $130-159$ <br> $\mathrm{mg} / \mathrm{dl}$ | $160-189$ <br> $\mathrm{mg} / \mathrm{dl}$ | $>190$ <br> $\mathrm{mg} / \mathrm{dl}$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LDL | 69 | 27 | 01 | 03 | 100 |
| Total LDL | Value IN $\%$ |  |  |  |  |
| Normal |  |  |  |  |  |
| Abnormal |  | $31 \%$ |  |  |  |

Table-5

| Lipid profile | Value in \% |
| :--- | :--- |
| Normal lipid profile | $63 \%$ |
| Abnormal lipid profile | $37 \%$ |

Table-6

| Presenting illness | Value in \%(total 100 case) |
| :--- | :--- |
| MI | $90 \%$ (male-57,femle-33)M $>\mathrm{F}$ |
| CVS | $10 \%($ male-6,femle-4)M $>\mathrm{F}$ |

## CONCLUSION

At the end of study conclusion is there is "No positive correlation between MI and CVS stroke with total cholesterol and LDL leval [4, 5, 2]."

So That, Total cholesterol or LDL level is not a risk factor for MI or cerebrovascular disease [3-6].

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