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BACKGROUND

Stroke recurrence poses a critical risk in developing countries. Clopidogrel resistance, driven by genetic polymorphism, is a major contributor to treatment failure. Addressing clopidogrel resistance due to genetic polymorphism is imperative to improve stroke management in developing nations.

OBJECTIVES

This study aimed to analyze the prevalence of clopidogrel resistance in patients with recurrent stroke, explore therapy changes, factors involved, and economic impacts.

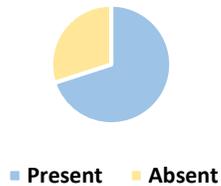
METHODOLOGY

- The study was conducted retrospectively.
- Data gathered from medical records of recurrent stroke patients on dual antiplatelet therapy over the previous year from neurology department.
- Patient demographics, clinical information, medical history, and economic factors were documented.
- Genotyping identified genetic polymorphisms linked to clopidogrel resistance, while the Chi-square test assessed associated risk factors. Therapy changes and its economic impacts were recorded.

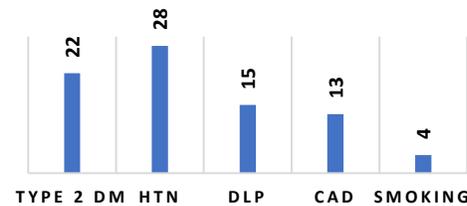
RESULTS

- The study included 40 patients, predominantly male, with a higher incidence of resistance observed in those over 60 years old. Genetic analysis revealed prevalent polymorphisms in CYP2C19 in 70% of the population.
- There were no significant associations between age, sex, diabetes, CAD, dyslipidemia, smoking with clopidogrel resistance, except for hypertension (95% CI; p=0.027).
- Patients with polymorphisms were switched to Ticagrelor, resulting in no new ischemic events during follow-up. Potential cost impact were noted for patients undergoing therapy switch.

CLOPIDOGREL RESISTANCE



CLOPIDOGREL RESISTANCE AND ASSOCIATED RISK FACTORS



Hypertension	Clopidogrel resistance		Total	χ^2 test
	Present	Absent		
Present	28	10	38	$\chi^2=4.912,$ df=1, p= 0.027 *
Absent	0	2	2	

CONCLUSION

Clopidogrel resistance was notably higher in patients experiencing recurrent strokes, indicating the potential necessity for therapy alteration in non-responsive individuals to mitigate the risk of additional ischemic events. The findings underscore the critical need for a holistic approach to antiplatelet therapy, wherein clinical and economic factors are carefully integrated to optimize patient outcomes. Further investigations are imperative to elucidate the diverse impact of clopidogrel resistance.

REFERENCES

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