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# Assessment of Signs & Symptoms and Prescription Pattern in Stroke Patients: A Prospective Observational Study in Tertiary Care Hospital

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**ABSTRACT**:

**Background**: Stroke is a leading cause of death and disability worldwide. According to the world health organization (WHO), Stroke affects millions of people globally each year. The global burden of stroke is expected to increase with an aging population and rising risk factors. Stroke risk increases with age, particularly in those over 55 years. It is more common in men at younger ages, but women tend to have a higher incidence after the age of 75. Hypertension is the most significant modifiable risk factor for stroke. **Methods:** A prospective observational study was conducted over six months at SDA Diamond Hospital & MRC , involving 120 patients diagnosed with stroke. Data were collected from medical case sheets, including demographic details, diagnoses, comorbidities, and medication usage. Ethical clearance was obtained from the SDPC Institutional Ethics Committee. **Results**: This prospective observational study examined the signs, symptoms, and drug prescribing patterns in stroke patients. The majority of subjects had ischemic stroke (81%), with 64.16% being male and 35.83% female. The highest incidence of stroke occurred in the 61-70 age group, followed by 31-40 years for hemorrhagic stroke and 51-60 years for ischemic stroke. Hypertension (55.83%) and diabetes mellitus (29.16%) were the most common risk factors for stroke, consistent with prior studies. Common symptoms included leg weakness(73.33%), arm weakness (70.83%), and facial weakness, while the most frequent signs were arm paresis (70.8%) and leg paresis (73.33%). Anti-platelet agents like aspirin and clopidogrel were the most commonly prescribed drugs, with combination therapy used primarily for ischemic stroke (70.10%). Thrombolytics (e.g., Tenecteplase) and fibrinolytics (e.g., Tranexamic acid) were used less frequently. Lipid-lowering agents, mainly atorvastatin (75.83%), and anticoagulants like enoxaparin were also prescribed.Antihypertensive drugs, including Telmisartan (40.20% in ischemic and 65.2% in hemorrhagic stroke) and nifedipine (14.43% in ischemic, 72.26% in hemorrhagic stroke), were commonly used. Diuretics, anti-diabetic medications (e.g., insulin and vildagliptin + metformin), and anti-epileptic drugs (levetiracetam) were also frequently prescribed. NSAIDs (e.g., acetaminophen) were used for pain relief, while antibiotics like ceftriaxone were prescribed for prophylaxis and infections.The study highlights the importance of managing stroke risk factors, as well as the diversity of medications used to manage stroke symptoms, prevent complications, and improve patient outcomes. **Conclusion:** This study highlights the significant role of hypertension and diabetes mellitus as major risk factors for stroke, with the highest incidence observed in males and the 61-70 age group. Common symptoms included limb weakness, paresis, and speech disturbances, while ischemic stroke was most prevalent. The study also emphasizes the importance of managing risk factors through lifestyle changes and medication adherence. Anti-platelet agents, antihypertensives, and anticoagulants were the most commonly prescribed treatments. A combination of aspirin and clopidogrel was frequently used for ischemic stroke, with enoxaparin also being widely prescribed. Effective management of risk factors, early intervention, and consistent follow-up care are essential for improving patient outcomes and quality of life following a stroke.

**Keywords:** Stroke, Ischemic Stroke, Hemorrhagic Stroke, Prescription Pattern, Signs and Symptoms, Antiplatelet Therapy.

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## I.INTRODUCTION

The World Health Organization (WHO) defined stroke as a sudden and rapid onset of clinical signs of focal or global disturbance of cerebral function, lasting more than 24 hr. or leading to death, with no apparent cause other than of vascular origin 1970.

Stroke is a major health issue worldwide, and is the second leading cause of death globally and fourth in the UK, according to the world health organization and the stroke association. Strokes occurs every two seconds globally, and their aftermath can result in serious disabilities, with half of all stroke survivors having some form of disability and over one-third requiring care from others.

Stroke is the leading cause of disability among adults and the fifth leading cause of death in the united states, behind cardiovascular disease, cancer, unintentional injuries, and chronic lower respiratory disease. Although the incidence of stroke has been trending downward, approximately 795000 strokes occurred in 2024 that resulted in 2014 that resulted in 133,103 deaths. Aggressive efforts to organize stroke care at the local and regional levels and increased utilization of Evidence based recommendations and national guidelines may have contributed to the improved outcomes.

**OBJECTIVES:**

1.To assess the common sign & symptoms observed in stroke patients.
2.To assess the prescription patterns:
a. Common prescribed drugs.
b. Common prescribed doses of drugs.
c. Common followed treatment of the stroke patients.

## II. MATERIALS & METHODS:

STUDY DESIGN: A prospective observational study was conducted at SDA Diamond Hospital & MRC, Surat from October 2024 to March 2025. This study was approved by the SDPC ethics committee and all the required documents were submitted including Case Report Form.

STUDY DURATION:
The total duration of the study was six months from October 2024 to March 2025.

STUDY SUBJECTS:
The Total of 120 patients with Stroke were enrolled in the study.

STUDY SITE:
The study was conducted at the SDA Diamond Hospital & MRC, Surat.

INCLUSION CRITERIA:
• Patient above 18yrs of age and above with stroke: ischemic and hemorrhagic stroke.
• Patient With or Without Comorbidities.
• All in Patient with stroke admitted for > 24 hours will be included in the study.

EXCLUSION CRITERIA:
• Below 18yrs of Age
• Pregnant and Lactating Women
• Patient discharged within 24 hours were included from study.

METHODOLOGY:
The study was conducted by the ICH-GCP guidelines. Important documents such as protocol, and data collection form like ICF, and CRF was presented to the Ethics committee for approval of the same. The study proceeded after permission was granted.

This study was designed as a prospective observational study. This was a single-site study conducted at SDA – Diamond Hospital, Surat for inpatients diagnosed with ischemic as well as hemorrhagic stroke patients in the span of 6 months from October 2024- March 2025. The main aim was the Assessment of signs & symptoms & prescription patterns in stroke patients.
The number of participants in the study included was 120 according to our inclusion and exclusion criteria of the study.

## III. RESULTS AND STATISTICS:

**[1] Assessment of Types of stroke:**

Out of the 120 patients, 97(81%) have ischemic conditions, while 23 (19%) have haemorrhagic conditions.

| Types of Strokes | No. of Patients | Percentage |
|---|---|---|
| **Haemorrhagic** | 23 | 19% |

International Journal of Pharmaceutical research and Applications
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| | | |
|---|---|---|
| **Ischemic** | 97 | 81% |

**Table 1**: **Assessment of types of stroke Patients**

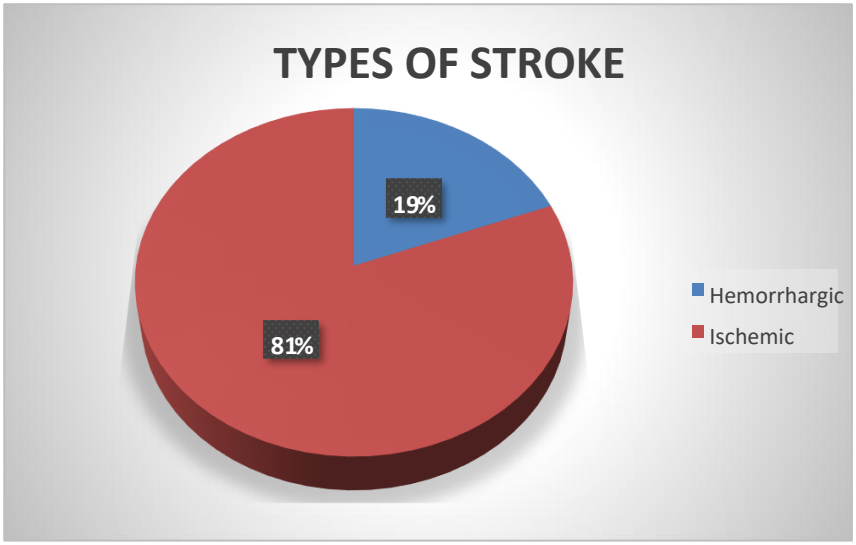


**Fig 1. Assessment of types of stroke Patients**

**[2] Assessment of Genderwise Distribution:**
In this study, a total of 120 prescriptions were included based on the established inclusion and exclusion criteria. Among them, the HS consisted of 16 males and 7 females, while the IS included 61 males and 36 females.

| Types of Stroke | Male (No. of patients) | Female (No. of patients) |
|---|---|---|
| **HS** | 16 | 7 |
| **IS** | 61 | 36 |

**Table 2: Assessment of Gender wise distribution in subtypes of stroke**

**[3]Assessment of age Group Distribution:**
The table shows age group distribution in HS and IS patients. The highest number of IS patients falls in the 61-70 age group (28), followed by 51-60 (25) and 8190 (13), while HS patients are evenly distributed, with the highest counts in 3140, 41-50, 51-60, and 61-70 (5 each). Younger (18-30) and older (91-100) age groups have the least patients in both categories.

| Age Group | HS (No. of Patient) | IS (No. of Patient) |
|---|---|---|
| **18-30** | 1(4%) | 2(2.06%) |
| **31-40** | 5(22%) | 3(3.09%) |
| **41-50** | 3(13%) | 7(7.21%) |
| **51-60** | 4(17%) | 25(25.77%) |
| **61-70** | 5(22%) | 28(28.86%) |
| **71-80** | 3(13%) | 18(18.55%) |
| **81-90** | 1(4%) | 13(13.40%) |
| **91-100** | 1(4%) | 1(1.03%) |

**Table 3: Assessment of Age group distribution in subtypes of stroke**

**[4] Assessment of Co-Morbidities:**
The table presents data on comorbidities in two groups, HS and IS, along with their respective percentages. Hypertension (HTN) is the most common comorbidity in both groups, affecting 65.21% of HS patients and 53.60% of IS patients. Diabetes Mellitus (DM) is the second most prevalent in the IS group (31.95%), while Ischemic Heart Disease (IHD) is present in 10.30% of IS patients but

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absent in HS patients. Chronic Obstructive Pulmonary Disease (COPD) is seen in 13.04% of HS patients and 3.09% of IS patients. Lung disease and Chronic Kidney Disease (CKD) are both absent in HS patients but affect 3.09% and 2.06% of IS patients, respectively. Hypothyroidism is present in 8.69% of HS patients and 1.03% of IS patients, while Atrial Fibrillation (AF) is observed in 4.34% of HS patients and 1.03% of IS patients.

| Co-Morbidities | HS | Percentage (%) | IS | Percentage (%) |
|---|---|---|---|---|
| **HTN** | 15 | 65.21% | 52 | 53.60% |
| **DM** | 4 | 17.39% | 31 | 31.95% |
| **IHD** | 0 | - | 10 | 10.30% |
| **COPD** | 3 | 13.04% | 3 | 3.09% |
| **Lung Disease** | 0 | - | 3 | 3.09% |
| **CKD** | 1 | 4.34% | 2 | 2.06% |
| **Hypothyroidism** | 2 | 8.69% | 1 | 1.03% |
| **AF** | 1 | 4.34% | 1 | 1.03% |

**Table 4: Assessment of Co-morbidities in subtypes of stroke**

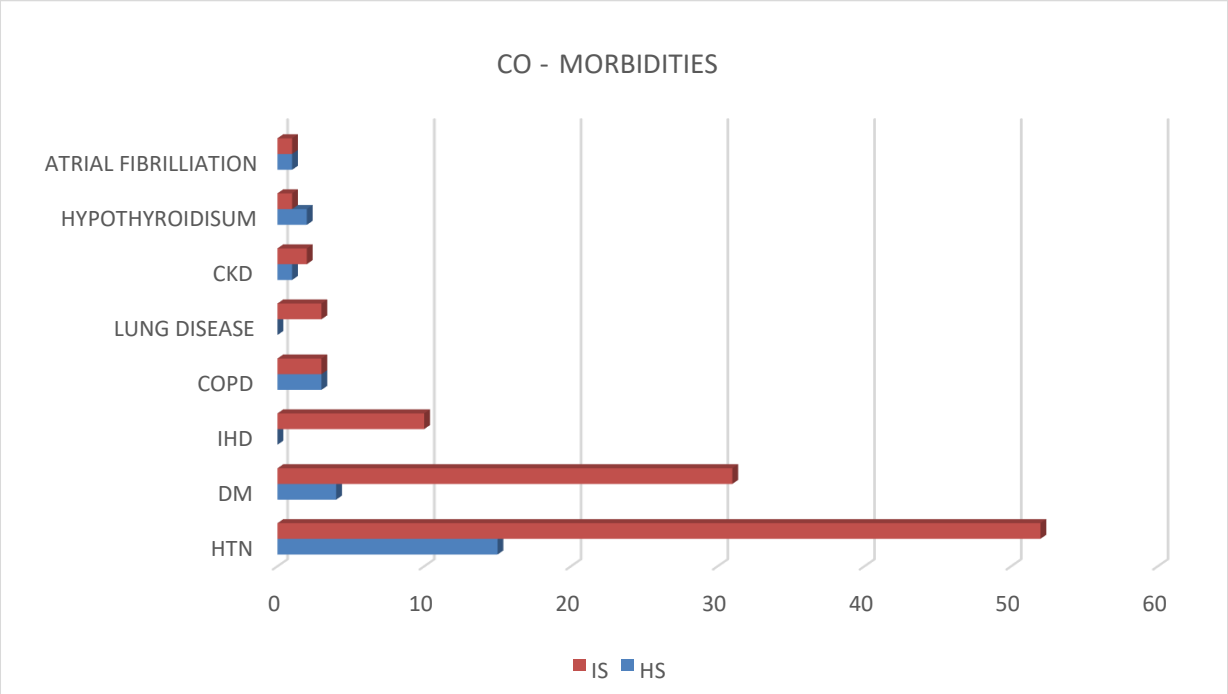


**Fig 2. Assessment of Co-morbidities in subtypes of stroke**

**[5] Assessment of Risk Factor**:
The table shows risk factors in HS and IS groups. Hypertension (65.21% HS, 53.60% IS) is the most common, followed by Diabetes Mellitus (17.39% HS, 31.95% IS) and OLD CVA (13.04% HS, 21.64% IS). IHD is absent in HS but present in 10.30% of IS cases. Smoking (4.34% HS, 6.10% IS) and alcohol use (8.96% HS, 2.06% IS) vary, while smoking with alcohol is seen only in IS (1.03%).

| Risk Factor | HS | Percentage (%) | IS | Percentage (%) |
|---|---|---|---|---|
| **HTN** | 15 | 65.21% | 52 | 53.60% |

International Journal of Pharmaceutical research and Applications
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| | | | | |
|---|---|---|---|---|
| **DM** | 4 | 17.39% | 31 | 31.95% |
| **IHD** | 0 | - | 10 | 10.30% |
| **OLD CVA** | 3 | 13.04% | 21 | 21.64% |
| **Smoking** | 1 | 4.34% | 6 | 6.1% |
| **Alcohol** | 2 | 8.69% | 2 | 2.06% |
| **Smoking & Alcohol** | 0 | - | 1 | 1.03% |

**Table 5: Assessment of risk factor in subtypes of stroke**

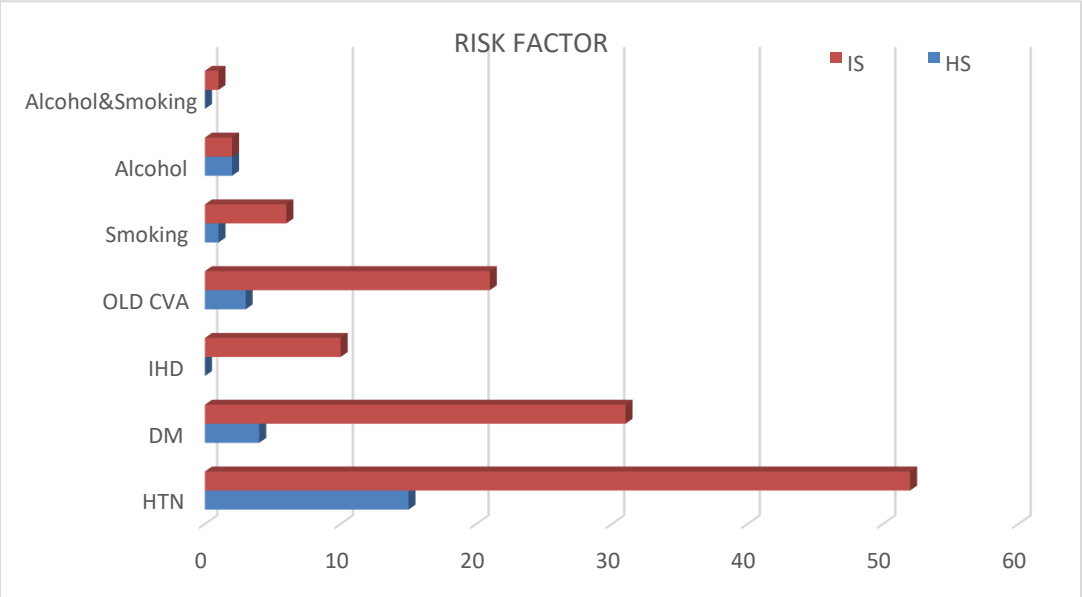


**Fig 3. Assessment of risk factor in subtypes of stroke**

**[6] Signs of Stroke:**

The table presents neurological signs in HS and IS groups. Arm paresis (78.26% HS, 69.07% IS) and leg paresis (82.60% HS, 71.13% IS) are the most common findings. Facial paresis is seen in 30.43% of HS and 22.68% of IS cases. Eye movement abnormalities are absent in HS but present in 12.37% of IS cases. Ataxia (26.08% HS, 9.27% IS), dysphasia (8.34% HS, 6.18% IS), and visual field defects (0% HS, 7.21% IS) vary, while hemiparetic gait is seen only in 1.03% of IS cases.

| Signs | HS | Percentage (%) | IS | Percentage (%) |
|---|---|---|---|---|
| **Arm Paresis** | 18 | 78.26% | 67 | 69.07% |
| **Leg Paresis** | 19 | 82.60% | 69 | 71.13% |
| **Facial Paresis** | 7 | 30.43% | 22 | 22.68% |
| **Eye movement abnormality** | 0 | - | 12 | 12.37% |
| **Ataxia** | 6 | 26.08% | 9 | 9.27% |
| **Dysphasia** | 1 | 4.34% | 6 | 6.18% |
| **Visual Field defect** | 0 | - | 7 | 7.21% |
| **Hemiparetic gait** | 0 | - | 1 | 1.03% |

**Table 6: Assessment of signs in subtypes of stroke**

International Journal of Pharmaceutical research and Applications
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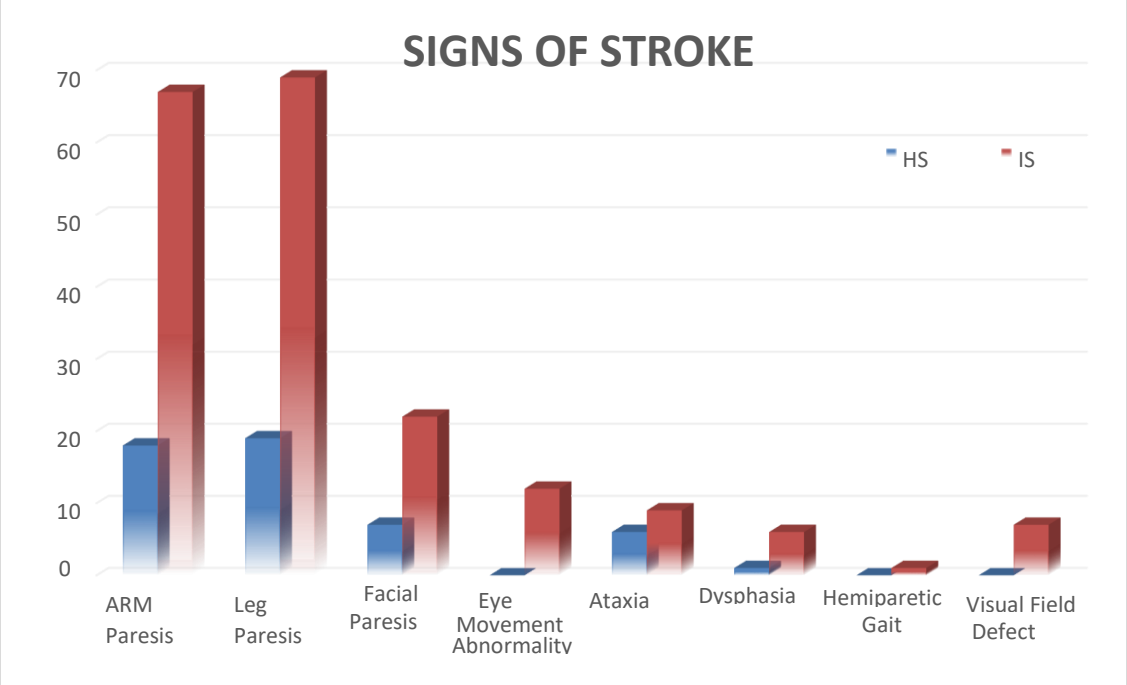


**Fig 4. Assessment of signs in subtypes of stroke**

**[7] Symptoms of Stroke:**

The table presents symptoms in HS and IS groups. Arm weakness (78.26% HS, 71.13% IS) and leg weakness (82.60% HS, 59.79% IS) are the most common symptoms, followed by facial weakness (34.78% HS, 34.02% IS). Giddiness (21.73% HS, 13.40% IS), headache (13.04% HS, 12.37% IS), and numbness (8.69% HS, 16.49% IS) vary between groups. Drowsiness (26.08% HS, 8.24% IS) and altered sensorium (13.04% HS, 9.27% IS) are more frequent in HS patients, while ataxia (0% HS, 8.24% IS), dysphasia (0% HS, 9.27% IS), and general weakness (4.34% HS, 7.21% IS) are seen only in IS patients.

| Symptoms | HS | Percentage (%) | IS | Percentage (%) |
|---|---|---|---|---|
| **Arm Weakness** | 18 | 78.26% | 69 | 71.13% |
| **Leg Weakness** | 19 | 82.60% | 58 | 59.79% |
| **Facial Weakness** | 8 | 34.78% | 33 | 34.02% |
| **Giddiness** | 5 | 21.73% | 13 | 13.40% |
| **Headache** | 3 | 13.04% | 12 | 12.37% |
| **Numbness** | 2 | 8.69% | 16 | 16.49% |
| **Drowsiness** | 6 | 26.08% | 8 | 8.24% |
| **Altered Sensorium** | 3 | 13.04% | 9 | 9.27% |
| **Ataxia** | 0 | - | 8 | 8.24% |
| **Dysphasia** | 0 | - | 9 | 9.27% |
| **General Weakness** | 1 | 4.34% | 7 | 7.21% |
| **Speech Disturbance** | 11 | 47.82% | 33 | 34.02% |

**Table7: Assessment of symptoms in subtypes of stroke**

International Journal of Pharmaceutical research and Applications
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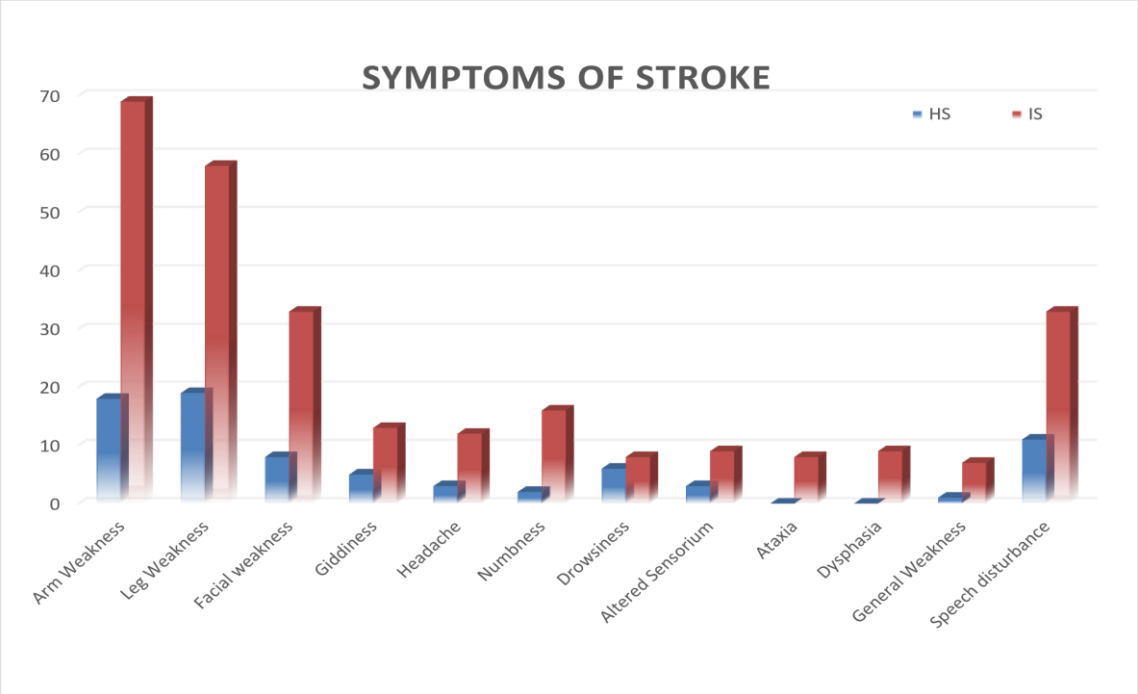


**Fig 5. Assessment of symptoms in subtypes of stroke**

**Table 8: Use of Anti-coagulants, Anti-Platelet, Anti-Fibirinolytic, Thrombolytics and Nootropics in subtypes of stroke**

| *Therapeutic* | *Drugs* | *Dosage* | *Frequency* | *ROA* | *IS* *n (%)* | *HS drug class* *n (%)* |
|---|---|---|---|---|---|---|
| *Anti-Platelet* | Aspirin | 75mg | OD | Oral | 84(86.59) | 6(26.08) |
| | Clopidogrel | | OD | Oral | 10(10.30) | - |
| | Aspirin+ Clopidogrel | 75/150mg | OD | Oral | 68(70.10) | - |
| *Anti-Fibirinolytic Thrombolytics* | Tranexamic acid | 500mg | BD | IV | 7(7.21) | 9(39.13) |
| | Tenecteplase | 20mg | STAT | IV | 5(5.15) | - |
| *Anti-Coagulants* | Enoxaparin | 0.4ml | BD | SC | 58(59.79) | - |
| | Dabigartan | 110mg | OD | Oral | 2(2.06) | - |
| | Apixaban | 2.5mg | BD | Oral | 2(2.06) | - |
| | Acenocoumarol | 1mg | OD | Oral | 1(1.03) | - |
| *Nootropics* | Piracetam | 3mg | TID | IV | 2(2.06) | - |
| *Lipid- Lowering Agent* | Atorvastatin | 40mg | HS | Oral | 79(81.44) | 12(52.17) |
| | Rosuvastatin | 40mg | HS | Oral | 8(8.24) | - |

**Table 9: Concomitant Drugs:**

| **Drug class** | | **Drugs** | **Dosage** | **Frequency** | **ROA** | **IS** **n (%)** | **HS** **n (%)** |
|---|---|---|---|---|---|---|---|
| Anti-Hypertensive | ARBs | Telmisartan | 40mg | BD | Oral | 39(40.20) | 15(65.2) |
| | β- | Metoprolol | 25mg | OD | Oral | 4(4.12) | 1(4.34) |

International Journal of Pharmaceutical research and Applications
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|---|---|---|---|---|---|---|---|
| | Blocker | | | | | | |
| | α-Blocker | Clonidine | 0.1mg | BD | IV | 2(2.06) | 12(52.17) |
| | α-β Blocker | Labetalol | 20mg | BD | IV | 4(4.12) | 9(39.13) |
| | CCB | Nifedipine | 20mg | BD | Oral | 14(14.43) | 18(72.26) |
| | | Amlodipine | 10mg | OD | Oral | 13(13.04) | 1(4.34) |
| | Diuretic | Mannitol | 100ml | TID | IV | 9(9.27) | 14(60.86) |
| | | Torsemide | 20mg | BD | Oral | 2(2.06) | - |
| | | Spironolactone +Torsemide | 10/50mg | OD | Oral | 2(2.06) | - |
| | | Furosemide | 20mg | STAT | IV | 11(11.34) | 4(17.39) |
| Anti-Diabetic agent | | HAI | Acc. To RBS | | SC | 23(23.71) | 4(17.39) |
| | | Teneligliptin | 20mg | BD | Oral | 6(6.18) | 1(4.34) |
| | | Vildagliptin+ metformin | 50/500 | BD | Oral | 8(8.24) | 1(4.34) |
| | | Metformin | 500mg | BD | Oral | 2(2.06) | - |
| Anti-Epileptic | | Levetiracetam | 500mg | BD | IV | 43(44.32) | 22(95.65) |
| | | Brivaracetam | 50mg | BD | IV | 1(1.03) | 1(4.34) |
| | | Phenytoin | 100mg | BD | Oral | 2(2.06) | - |
| Anti-Alzheimer | | Memantine | 10mg | HS | Oral | 2(2.06) | - |
| | | Memantine +Donepezil | 20/10mg | HS | Oral | 1(1.03) | - |
| Anti-Psychotics | | Escitalopram | 10mg | OD | Oral | 2(2.06) | 1(4.34) |
| | | Clonazepam | 0.25mg | HS | Oral | 1(1.03) | - |
| | | Escitalopram+ Clonazepam | 10/0.25 | HS | Oral | 1(1.03) | - |
| NSAIDs | | Acetaminophen | 1gm | STAT | IV | 25(25.77) | 12(52.17) |
| | | Baclofen | 10mg | BD | Oral | - | 2(8.69) |
| | | Naproxen | 250mg | SOS | Oral | 8(5.24) | - |
| Steroids | | Hydrocortisone | 100mg | BD | IV | 9(9.27) | 4(17.39) |
| | | Dexamethasone | 2mg | TID | IV | 4(4.12) | - |
| Laxatives | | Lactulose | 30ml | HS | Oral | 23(23.71) | 10(43.47) |
| | | Liquid Paraffin | 30ml | HS | Oral | 7(7.21) | 4(17.39) |
| Multi-Vitamins | | Phosphatidylserine +Huperzine A+ Acetylcarnitine+ N-Acetylcysteine+ Alpha Lipoic Acid+ Ginkgo Biloba Extract +Vinpocetine + | 100mg | BD | Oral | 68(78.10) | 16(69.56) |

International Journal of Pharmaceutical research and Applications
Volume 11, Issue 3, May-June2026, pp:1715-1726 www.ijprajournal.com ISSN:2456-4494

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|---|---|---|---|---|---|---|
| | Cyanocobalamin Capsules | | | | | |
| | Vitamin B9 +B6+ B12 | 1mg+10mg + 400mcg | OD | Oral | 4(4.12) | - |
| Antibiotics | Cefoperazone +Salbactum | 1.5gm | BD | IV | 17(17.52) | 2(8.69) |
| | Ceftriaxone +Salbactum | 1gm | BD | IV | 21(21.64) | 12(52.17) |
| | Piperacillin +Tazobactum | 2.25gm | TDS | IV | 1(1.03) | 1(4.34) |
| | Meropenum | 200mg | BD | Oral | 5(5.15) | 6(26.08) |
| | Ceftriaxone | 1gm | BD | Oral | 5(5.15) | - |
| | Cefixime | 200mg | BD | Oral | 4(4.12) | - |
| | Metronidazole | 600mg | BD | Oral | 7(7.21) | 2(8.69) |
| | Clindamycin | 600mg | BD | Oral | 4(4.12) | 3(13.04) |
| Bronchodilator | Neb.Ipratropium Bromide + Levosalbutamol | | TID | Nasal | 14(14.43) | 5(21.73) |
| | Neb. Budesonide | | TID | Nasal | 13(13.40) | 5(21.73) |
| | Neb. Salbutamol | | TID | Nasal | 1(1.03) | - |
| Sedatives/ Hypnotics | Modafinil | 100mg | BD | Oral | 14(14.43) | 9(39.13) |
| | Midazolam | 2ml | STAT | IV | 3(3.09) | - |
| | Quetiapine | 25mg | OD | Oral | 6(6.18) | 1(4.34) |

## V. DISCUSSION:

A prospective observational study was carried out on sign and symptoms & prescribing pattern of drugs used in stroke patient. In the present study majority of subject were diagnosed with ischemic stroke (81%) than haemorrhagic stroke (19%). Out of 120 patient 77 (64.16%) patient were male and 43 (35.83%) were female. The incidence of stroke was high among the group of 61-70 years in both ischemic and haemorrhagic stroke followed by age group of 31- 40 years and 6170 years in haemorrhagic stroke, and followed by age group of 51-60 years for ischemic. These was on a similar note with previous study conducted *by Upendra et al.*

In the present study it was found that the most subjects were hypertensive (55.83%) which is a major risk for development of stroke. After hypertension, Diabetes mellitus (29.16%) was found to be most common risk factor for development of stroke. Other factors that were found like ischemic heart disease, COPD, Lung disease. These was found similar with study conducted *by Gargi Dey et al.*

The incidence of stroke can also be attributed to smoking and alcohol. Smoking damage blood vessels leading to their blockage, increasing the risk of stroke. Both alcohol and smoking should be avoided. This was similar to study conducted *by Nikunj Koradiya et al.* Moreover, the presence of old CVA can also be attributed to development of stroke.

Out of total patient 73.33% presented with symptoms like Leg Weakness followed by Arm Weakness 70.83%. Facial weakness, Speech disturbance, Giddiness, Altered sensorium were the other symptoms seen. This was similar to study conducted *by Upendra et al.*

The study also identified Arm paresis (70.8%) and the leg paresis (73.33%). Other signs like eye movement abnormality, Ataxia, Facial paresis were seen. Hemiparetic gait, visual field effect, Dysphasia were less commonly seen signs.

Finally, the study examined the prescription pattern of Anti-platelet, Antifibrinolytic, Thrombolytic, Anti-coagulants, Lipid-lowering agent these drugs are commonly used to prevent and manage stroke. These drugs help in managing the cause of stroke and helps manage it.

The study analyzed the prescribing pattern of various drugs used for both subtypes of stroke. Anti-platelet agents such as clopidogrel and aspirin were used as monotherapy in both ischemic and hemorrhagic stroke but combination therapy i.e., aspirin + clopidogrel (70.10%) was only used in

International Journal of Pharmaceutical research and Applications
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ischemic stroke. Thrombolytics such as Tenecteplase was used in a small number of patient (5.15%) with ischemic stroke patients. Tranexamic acid, a fibrinolytic agent was also been prescribed to both ischemic (7.21%) and hemorrhagic stroke patients (39.13). Atorvastatin was the most commonly administered lipid lowering agent in both subtypes of stroke (75.83%), followed by rosuvastatin that was only prescribed to 8 patients. Anticoagulant agents such as enoxaparin, dabigatran, apixaban, acenocoumarol was given to ischemic stroke patients.

Among the different class of antihypertensive drugs, calcium channel blockers, angiotensin receptor blocker (ARB's), β-blockers, α-blocker, α-β blockers were commonly used, out of which Telmisartan (40.20% in ischemic and 65.2% in hemorrhagic stroke) and nifedipine (14.43% in ischemic stroke and 72.26% in hemorrhagic stroke) were the most commonly prescribed drugs. This result is on a similar note with study conducted *by Mohammed Yaseen Abbasi et, al.* Diuretics such as mannitol, torsemide, furosemide, spironolactone+ torsemide were prescribed. Mannitol was also given as an anti-oedema drug in patient (9.27% and 60.86% in ischemic and hemorrhagic stroke respectively).

Among different anti-diabetic drugs prescribed, human act rapid insulin was the most commonly prescribed to patients, followed by combination of vildagliptin + metformin.

In terms of anti-epileptic drugs levetiracetam was the most commonly prescribed drug. It was prescribed to a total of 65 patients out of 120. Among anti-Alzheimer drug memantine individually and memantine+donepezil were administered. Anti-psychotics such as escitalopram and clonazepam were used individually and in combination for a very small number of patients.

NSAIDs such as Acetaminophen, naproxen, baclofen were used,out of which acetaminophen was most commonly prescribed in about 37 patients out of 120. The combination of Phosphatidylserine +Huperzine A+ Acetylcarnitine+ N Acetylcysteine+ Alpha Lipoic Acid+ Ginkgo Biloba Extract +Vinpocetine + Cyanocobalamin Capsules was prescribed to 74 patients as supplement.

Antibiotics were also prescribed for prophylaxis and infection. Most commonly prescribed antibiotics were combination of ceftriaxone and salbactum given to total 33 patients, followed by cefoperazone + Salbactum prescribed to 19 patients. Other commonly prescribed antibiotics were clindamycin, cefixime, ceftriaxone, meropenem.

Among sedative-hypnotics modafinil was administered to about 25 patients, followed by quetiapine and midazolam. Other drugs prescribed were laxatives, nootropics, steroids, bronchodilators as nebulizers, vitamin supplements, PPIs, H2 blockers. However, the study do not provide detailed information on these drugs.

## VI. CONCLUSION:

Stroke is the second leading cause of death in the world. The study showed data on sign and symptoms, risk factors and prescribing pattern in stroke patients. In the present study, most patients were admitted with ischemic stroke. In our study we observed that the occurrence of stroke can be most commonly seen in age group of 61-70 years. Males were more diagnosed with stroke than females. The findings suggest that Hypertension is the most common risk factor followed by diabetes mellitus. Old CVA also contributes to development of stroke. Lifestyle modifications like quitting alcohol and smoking may reduce chances of stroke. The most commonly seen sign and symptoms were weakness and paresis of upper and lower limb, along with which speech disturbance, facial palsy were found to be seen in patients. Hemiparetic gait, eye movement abnormality, ataxia were uncommon but seen. In the present study, most commonly prescribed class of drugs were anti-platelet, anti-hypertensives, anticoagulants. Combination of aspirin+ clopidogrel was prescribed majorly in ischemic stroke patients. Enoxaparin was also one of the most prescribed drugs to ischemic stroke patients. Hypertension should be managed, proper history of patients should be taken. Among other drugs vitamins & supplements, antacids, H2 blockers are most commonly prescribed. Follow up of the patient should be taken to check for medication adherence. Combination therapy, lifestyle changes and better management of risk factors said to possess the major effect on recovery of stroke with improved quality of life and symptoms.

**ABBREVIATION:**

- AF- Atrial fibrilliation
- ARB- angiotensin receptor blocker
- CCB- Calcium Channel Blocker
- CKD- Chronic Kidney Disease
- COPD- Chronic Obstructive Pulmonary Disease
- CVA- Cardiovascular Accident
- DM- Diabetes Mellitus
- HTN- Hypertension
- HS- Haemorrhagic Stroke
- IHD- Ischemic Heart Disease

- IS- Ischemic Stroke
- NSAID-Nonsteroidal Anti-Inflammatory Drugs
- PPI- Proton Pump Inhibitor

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