**The Diagnosis and Treatment of Stroke Patients**

**Introduction**

Stroke is one of the leading causes of death in the world and constitutes almost 12% of the deaths in the world. Approximately, there are nearly one million cases of stroke reported every year. A stroke occurs when the supply of blood to the brain is interrupted by either a blockage or a rupture of the blood vessels, which causes brain tissue to die (Barrett & Meschia, 2013). The causes of stroke form the kinds of stroke that occur. According to Rota, Mrelli, and Immovilli (2017), the blockage of the blood vessels causes ischemic stroke while rupture of the vessels causes hemorrhagic stroke. There are chances that a person may not know that he or she has a stroke since it depends on the part of the brain that is affected. However, in most instances, the symptoms of a stroke develop immediately, and they may be very severe. Stroke is the fifth deadliest disease in the world and causes long-term disability and eventually death. However, the early identification and treatment of the illness can help alleviate the damage in the brain that leads to stroke. Little is known about the symptoms, diagnosis, and treatment of stroke especially in under-developed countries. As part of promoting the management of stroke, this paper will examine the diagnosis and treatment of stroke patients.

**Diagnosis of Stroke**

The determination of the most effective treatment for a patient’s stroke is dependent on the evaluation of the stroke the patient has and the damage to the brain. The below are the numerous tests carried out to determine the risk of stroke.

1. Physical examination

The physical examination test involves the analysis of the patient’s symptoms history by asking the family members and see if the symptoms are still present. Rota et al. (2017) note that this test also involves the doctor examining the patient’s history of medication and head injuries. It is from this evaluation that the doctor can come up with an appropriate treatment plan.

1. Blood test

Blood tests are effective ways of identifying stroke in patients. Patients may have several blood tests that assist the doctors to determine how fast the patient’s blood clots, establish the blood pressure, the blood sugar levels, the levels of chemicals in the blood and infections within the patient’s blood (Siegel, Pizzi, & Freeman, 2017).

1. Magnetic resonance imaging (MRI)

The MRI utilizes strong magnets and radio waves to view the brain. This test identifies some of the damaged parts of the brain caused by the two types of stroke. The flow of blood to the brain from the neck can be aided by an injected dye in the blood vessels (Siegel et al., 2017).

1. Computerized tomography scan (CT scan)

CT scan helps in the identification of tumors, hemorrhages, and other symptoms of a stroke using X-rays. Similar to the MRI, the doctors may inject the patient blood vessels with dye to view the flow of blood to the brain from the neck (Siegel et al., 2017).

1. Echocardiogram

This test is used to show an overall image of the heart through the use of sound waves. The sound waves are utilized to determine blood clots in the blood stream especially within the brain. According to Barrett and Meschia (2013), one particular echocardiogram test is transesophageal echocardiogram where a tube is inserted through the patient's throat to the stomach behind the heat, and clear images can be obtained of the heart and blood clots.

1. Cerebral angiogram

This test is similar to the echocardiogram where the doctor inserts a catheter through a small opening on the patient’s groin to the carotid through the major arteries.  The doctor then injects dye into the blood stream to make the blood flow visible (Barrett & Meschia, 2013).

**Treatment of stroke**

1. Neurorehabilitation

Neurorehabilitation involves numerous therapies such as physical and speech therapy. This treatment method is most effective in treatment for stroke patients who exhibit the loss of control of balance or difficulty in speaking (Barrett & Meschia, 2013).

1. Brain surgery

Brain surgery involves the opening of the carotid artery and removing any blockage or clot. This method is used to treat the ischemic stroke caused by blood clots. The method also helps in the removal of blood clots and repair the damaged blood vessels. Additionally, the surgery can be done to inflate the arteries in the brain that may have constricted leading to reduced blood flow to the brain.

1. Medication

Stroke can be treated through drugs that alleviate the pressure on the brain and blood clots. Aspirin is a drug that doctors inject to patients to dissolve clots. Additionally, the constriction of the blood vessels can be treated through Warfarin and Clopidogrel (Rota et al., 2017).

**Conclusion**

This paper discussed the diagnoses and treatment of the two types of stroke. The treatment of stroke is dependent on the diagnosis and identification of the type of stroke (Rota et al., 2017). Notably, the types of stroke have distinct causes and identification of the causes can go a long way in the identification of the treatment. The early diagnosis and appropriate treatment of stroke patients help in the reduction of deaths caused by stroke.

**References**

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