

TRANSIENT ISCHEMIC ATTACKS

Introduction:

A Transient Ischemic Attack (TIA) is a temporary or intermittent neurological event. During the course of this event an applicant might find his words garbled and find that he is unsteady. In a few minutes the signs and symptoms disappear. While the TIA does not last very long it does not mean that it is not significant. About one in three people who have a TIA eventually have a stroke, with about half occurring during the year after the TIA. While a TIA can serve as a warning of an impending stroke it can also be an opportunity to take steps to prevent a full-blown stroke.

Signs and Symptoms:

TIAs usually last a few minutes. Most signs and symptoms disappear within an hour and by definition all effects disappear within 24 hours. The signs and symptoms of a TIA resemble those found early in a stroke and may include:

- 1) Sudden weakness or paralysis in the face, arm, or leg typically, on one side of the body
- 2) Slurred or garbled speech or difficulty understanding others
- 3) Sudden blindness in one or both eyes or double vision
- 4) Dizziness, loss of balance or coordination.

People can have more than one TIA and the recurrent signs and symptoms may be similar or different depending upon which area of the brain is involved. If signs and symptoms last over 24 hours the event is considered a stroke.

Causes:

The cause of a TIA is a temporary decrease in blood supply to part of the brain. Most attacks only last a few minutes. A TIA has the same origins as that of an ischemic stroke. In ischemic strokes (the most common type of stroke) a clot blocks the blood supply to the brain. But in contrast to the stroke, which involves a prolonged lack of blood supply

and causes some permanent damage to the brain tissue the TIA does not leave lasting effects on the brain. The underlying cause of a TIA often is the buildup of cholesterolcontaining plaque in an artery or one of the branches that supply oxygen and nutrients to the brain. Plaques decrease the blood through an artery or lead to the development of a clot. Other causes include a clot moving to the brain from another part of the body.

Risk Factors:

There are risk factors for TIAs that can be controlled and others that cannot.

Some of the risk factors that cannot be controlled include:

- 1) Family History: the risk may be greater if a family member has had a TIA or a stroke
- 2) Age: The risk increases with age
- 3) Sex: Men generally have a higher incidence of TIAs and strokes than women do. However when it comes to deaths from strokes the gender difference reverses. More than half of the deaths from stoke occur in women.
- 4) Race: Blacks are at greater risk of dying from stroke than are people of other races. Part of the reason for this is because of the higher prevalence of hypertension and diabetes.

Among the controllable risk factors are:

1) Hypertension: Hypertension not well controlled increases the risk of TIA or stroke.

2) Poor diet lack, of exercise, being overweight contribute to this risk factor.

3) Cardiovascular disease: Conditions such as CAD Valve disease and Atrial Fibrillation increase the risk. The heart is not pumping the blood as effectively and this increases the risk of clots. These clots have the potential to break off and travel to the brain.

4) Smoking: Smoking increases the risk of blood clots. Nicotine increases the heart rate and blood pressure additionally smoking contributes to fatty deposits in the arteries.

Additional risk for TIAs or strokes:

1) Diabetes: Diabetes increases the severity of arteriosclerosis- narrowing of the arteries due to accumulation of fatty deposits.

2) Blood disorders such as sickle cell anemia increase the risk of stroke because these abnormalities can cause blood cells to be stickier and more likely to cling to artery walls.3) Migraines: There have been some studies that have found that people with chronic headaches have increased risk of stroke. However not all studies have found this link and additional research is ongoing concerning this risk factor.

4) Obesity: The risk of stroke increases with obesity.

5) Carotid Artery Disease: Narrowing of the carotid arteries will increase the risk of stroke. Carotid endarectomy may be needed to prevent a stroke from occurring.
6) Heavy Drinking: While moderate drinking –up to 2 drinks a day for men and 1 for women per day is associated with reduced risk of stroke drinking more than this appears

to increase the stroke risk.

Screening and Diagnosis:

Characteristics of a Transient Ischemic Attack include rapid onset, short duration, and then the body's return to the normal state. Frequently the doctor may diagnose a TIA based on the medical history of the event rather than on anything found during a general physical or neurological examination. Physical examination may reveal evidence that suggests the presence of arterial plaques. For example a sound (bruit) may be heard over the carotid artery in the neck during an examination. The Carotid Ultrasound allows doctors to examine the carotid arteries to look for narrowing or clotting in the carotid arteries. CT scanning uses X-ray beams to assemble a composite 3 dimensional look at the brain. The MRI of the brain allows doctors a composite 3 dimensional view of the brain.

Treatment:

Once a TIA has occurred the goal of treatment is to prevent a stroke. Depending upon the actual cause of the TIA doctors may prescribe medications to reduce the tendency of blood to clot. Two frequently prescribed types of drugs are: Anti platelet drugs and Anticoagulants. Anti platelet drugs make platelets less likely to stick together. Clot formation starts by sticky platelets when there is an injury to blood vessels. Aspirin is the most frequently used anti platelet medication. Plavix is another anti platelet medication. Anticoagulants such as heparin and warfarin (Coumadin) affect the clotting system proteins instead of the platelet function.

Where full investigation of a TIA has revealed moderate to severe narrowed neck (carotid) arteries a carotid endarectomy can be done that removed the carotid arteries of fatty deposits. Before another TIA or stroke can occur.

Again control of risk factors, proper diet and exercise can help prevent a TIA.

Underwriting:

The ratings for TIA depend upon cause, number of TIAs and results of any Carotid studies. For example TIA caused by migraine or oral contraceptive use with no underlying cerebrovascular disease could be Standard.

A single TIA brought on by unknown cause or undetermined cause will depend upon the age of the applicant. Applicants over the age of 40 who have had a TIA within 6 months to a year before the application was taken would be Table 3 plus perhaps a flat extra of \$5.00/m for a couple of years After a year they would be Table 2. Applicant would be STD after 3 years.

Generally applicants who have had multiple TIAs would be treated as if they had a stroke. In other words those who have had multiple TIAs would be postponed for one year after the last TIA. After a year they would be Table 4 plus a flat extra of at least \$5.00/m for 3 years. With some carriers the flat extra might be more like \$7.50/m plus the Table 4.

If the MRI findings are indicative of a carotid stenosis of over 50% they would be ratable as if they had multiple TIA s even though they might have only have had a single event. If the applicant has known CAD, the ratings are added for CAD (That assumes that the CAD was mild to moderate.), and the TIA, then a plus 50 is added to that. The same applies with Diabetes. So for example a 55 year old male with decently controlled NIDDM and TIA 2 years ago would be a Table 6 at best. Remember Diabetes accelerates the atherosclerotic process.

One important thing is that a Negative Stress Test after the TIA can improve the rating. It can for example remove the flat extra in those cases where a flat extra might be added and it might in the case of a Table rating lower the table rating by a table.

Again with TIAs, as with most of the other disease processes, the better the applicant can control the risk factors within their control the better the potential rating will be.

Brendan Tuohy Consulting Underwriter American Brokerage Centers, LLC