SHAW AMERICAN FINANCIAL CORPORATION

Vascular Lesions of the Brain

Vascular lesions of the brain can cause seizures and strokes, but many are asymptomatic. They may be discovered incidentally when a brain scan (MRI or CT) is done as part of the work up of other conditions. Risk depends on type, size, and location of the lesion. Lesions include aneurysms, arteriovenous malformations (AVM), dural arteriovenous fistulas (DAVF), cavernous angiomas, venous angiomas, and capillary telangietasias. Most are congenital in origin, but some develop with aging. Some grow over time. They can rupture and bleed (brain hemorrhage) or they can clot (thrombosis). Such events are often fatal. Survivors frequently have physical or psychological residuals.

AVMs are abnormal connections between arteries and veins. The annual risk of bleeding (and death) increases with each subsequent bleed. Many are difficult to access surgically. A less deadly AVM is DAVF (aka dural arteriovenous malformation, dural fistula). This is an abnormal connection between an artery and a dural sinus. DAVFs are superficial and easily repaired by surgery.

Cavernous angioma (**aka cavernous hemangioma, cavernoma**) has an increased risk of bleeding if it grows in size. Bleeding episodes are less deadly than with AVMs, and surgery is less risky.

DVA (venous angioma) is a collection of enlarged veins. A **capillary telangiectasia** is small lesion made of tiny vessels. As low-pressure structures, these two lesions tend to be asymptomatic and rarely bleed. Most require no treatment. An **aneurysm** is a dilation of vessel, which weakens its wall. A **saccular aneurysm**, also called **berry** due to its shape, is commonly found in the large vessels at the base of the brain (the area known as the Circle of Willis). Most nontraumatic subarachnoid hemorrhages are due to rupture of a saccular aneurysm. Risk of rupture depends on the location and size of the aneurysm. Aneurysms that have already bled are at high risk for bleeding again. A **fusiform aneurysm** is a dilated segment of the vessel. They tend to clot rather than rupture. Treatment may be observation, surgery, gamma knife, radiation, or endovascular procedures such as coiling or embolization. Surgery is curative. Resolution after radiation is gradual, taking up to 2-3 years, and the risk for Hemorrhage continues during this time. Endovascular neurosurgery uses catheters to deliver coils or glues or particles that obliterate the vascular lesions. Embolization may not lead to complete occlusion and may be combined with surgery or radiation. Treatment itself may result in substantial morbidity and mortality so the risk of treatment must be balanced against the risk of bleeding. Deep lesions, such as those in the midbrain or lower brain stem, may be inoperable.

If your client has a history of a vascular lesion of the brain, please answer the following:

1. What type is it?
Berry aneurysm ____
Fusiform aneurysm ____
AVM ____
Cavernous angioma ____
Capillary telangiectasia ____
Venous angioma ____
Other, please specify _____

2. Please provide date of diagnosis?
_____

3. Were there any events such as clot, hemorrhage, or stroke?
Yes, please give details
_____
No, always asymptomatic ____

4. Has there been any treatment, such as clipping, coiling, embolization, gamma knife?
Yes, please give details
_____

5. Please provide a copy of latest brain scan. _____

6. Is your client on any medications?
Yes, please give details
_____

7. Has your client smoked cigarettes or any other tobacco products in the last 5 years?
Yes ____
No ____

8. Does your client have any other major health problems (ex: cancer, heart disease, seizures, psychiatric illness, etc.)?
Yes, please give details
_____