

2024 Quality Metrics for Public Reporting Stroke Related Procedure Outcomes

Below is a description of some of the stroke-related procedures performed at Our Lady of the Lake in Baton Rouge with quality information on the complication rates and outcomes of the patients who undergo such procedures.

Ventriculostomy

A Ventriculostomy is when a catheter is placed into the ventricles within the brain and cerebrospinal fluid (CSF) is drained, usually to relieve elevated intracranial pressure. Typically, a small drill hole is made in the skull to allow the introduction of the catheter through the brain and into the ventricle. It is usually connected by tubing to a cerebrospinal fluid collection device which also allows for monitoring of the intracranial pressure.

2024	Volume	Complications	Mortality
1 st Quarter	4	3	0
2 nd Quarter	12	0	0
3 rd Quarter	16	1	0
4 th Quarter	14	0	0
Total	46	4 (8.7%)	0

Decompressive Craniotomy

A Decompressive Craniotomy is a procedure performed to relieve pressure inside the skull. It is commonly done to relieve the pressure caused by mass effect, which can occur after strokes, bleeds and/or trauma. In order to prevent damage to the delicate tissues of the brain, during this procedure, a section of the skull is removed to allow a relief of the intracranial pressure, which gives the brain space to swell without causing further damage.

2024	Volume	Complications	Mortality
1 st Quarter	5	0	0
2 nd Quarter	5	0	0
3 rd Quarter	5	0	0
4 th Quarter	5	0	0
Total	20	0	0

Carotid Stenting

Carotid Stenting is an endovascular, catheter-based procedure which unblocks narrowing's of the carotid artery lumen to prevent stroke. The carotid arteries are located on each side of the neck and extended from the chest to the base of the skull. These arteries supply blood to the brain. When plaque builds up in the carotid arteries, it can reduce flow to the brain and result in stroke. It may also be a source for clots to embolize into the brain, which may also result in stroke.

2024	Volume	Complications	Mortality
1 st Quarter	8	0	0
2 nd Quarter	10	0	0
3 rd Quarter	5	1	0
4 th Quarter	7	0	0
Total	30	1 (<1%)	0(0%)

Carotid Endarterectomy

Carotid Endarterectomy is an operation during which a vascular surgeon eliminates plaque from the carotid artery by removing the inner lining of the artery if it has become thickened or damaged. This is done to help reduce the risk of stroke. During this procedure, the surgeon temporarily clamps the carotid artery to stop blood from flowing through it. After the surgeon clamps the carotid artery, he or she makes an incision directly into the blocked section. Next, the surgeon peels out the plaque deposit by removing the inner lining of the diseased section of the artery containing the plaque. After removing the plaque, the surgeon stitches the artery, removes the clamps or the bypass, and stops any bleeding. He or she then sutures the neck incision, and the procedure is complete.

2024	Volume	Complications	Mortality
1 st Quarter	80	3	0
2 nd Quarter	74	4	0
3 rd Quarter	68	4	1
4 th Quarter	69	1	0
Total	291	12 (4%)	1(<1%)

Aneurysm Clipping

Clipping is a surgical procedure performed to treat a balloon-like bulge of an artery wall known as an aneurysm. As an aneurysm grows, the vessel wall becomes thinner and weaker. It can become so thin that it can leak or rupture, releasing blood into the space around the brain resulting in what is known as a subarachnoid hemorrhage. A neurosurgeon places a tiny clip across the neck of the aneurysm from the normal circulation without blocking off any small perforating arteries nearby. Under general anesthesia an opening is made in the skull. A small clip is placed across the base, or neck, or the aneurysm to block the normal blood flow from entering. The clip works like a tiny coil-spring clothespin, in which the blades of the clip remain tightly closed until pressure is applied to open the blades, and then are deployed across the aneurysm neck, making it secure. Clips are made of titanium and remain on the artery permanently. It is, in some cases, an alternative to aneurysm coiling.

2024	Volume	Complications	Mortality
1 st Quarter	1	0	0
2 nd Quarter	0	0	0
3 rd Quarter	0	0	0
4 th Quarter	0	0	0
Total	0	0	0

Aneurysm Coiling

Coiling is a minimally invasive procedure performed to treat a balloon-like bulge of an artery wall known as an aneurysm. As an aneurysm grows, the vessel wall becomes thinner and weaker. It can become so thin that it can leak or rupture, releasing blood into the space around the brain resulting in what is known as a subarachnoid hemorrhage. In this procedure, tiny platinum coils are deploying and packed into the aneurysm to promote blood clotting inside the aneurysm, which secures it. Therefore, they stop blood from flowing into the aneurysm but allow blood to flow freely through the normal arteries. It is, in most cases, an alternative to aneurysm clipping.

2024	Volume	Complications	Mortality
1 st Quarter	16	0	0
2 nd Quarter	13	2	0
3 rd Quarter	16	1	0
4 th Quarter	26	3	0
Total	71	6 (8.5%)	0

Diagnostic Cerebral Angiography

Cerebral Angiography is a form of angiography which provides images of blood vessels in and around the brain, thereby allowing detection of abnormalities such as arteriovenous malformations and aneurysms. Typically, a catheter is inserted into a large artery (such as the femoral artery) and threaded through the circulatory system to the carotid artery, where a contrast agent is injected. A series of radiographs are taken as the contrast agent spreads through the brain's arterial system, then a second series as it reaches the venous system. The objective of the exam is to define the site and extend of the arterial abnormality, allowing the physicians to determine the best treatment options.

2024	Volume	Complications	Mortality
1 st Quarter	22	0	0
2 nd Quarter	28	0	0
3 rd Quarter	18	0	0
4 th Quarter	17	0	0
Total	85	0	0

THROMBOLYTIC:

Thrombolytics, Alteplase (Activase) or Tenecteplase (TNK-tPA), are a type of medication used for thrombolysis or as a "clot buster" to dissolve the clot blockage within the artery during a stroke. Effectiveness of this medication decreases with time and does have a risk for bleeding following the administration. Not all patients are candidates for this treatment as there are certain inclusion/exclusion criteria requirements.

2024	Volume	Complications	Mortality	% "Door to Needle"
				in 30 minutes
1 st Quarter	31	1	1	91%
2 nd Quarter	32	0	0	100%
3 rd Quarter	34	1	1	100%
4 th Quarter	22	0	0	94%
Total	119	1	1	97%

THROMBECTOMY:

A thrombectomy is a procedure performed to remove a clot that is blocking on of the large arteries of the brain during a stroke. This procedure is performed by inserting a catheter with a device attached to remove the clot. This procedure can be done in addition to the administration of a thrombolytic (tPA) medication or without, however effectiveness of this procedure decreases with time. Not all patients are candidates for this procedure as there are certain inclusion/exclusion criteria requirements.

2024	Volume	Complications	Mortality	"DTP" Median
1 st Quarter	57	3	0	64 minutes
2 nd Quarter	59	2	0	76 minutes
3 rd Quarter	51	0	3	56 minutes
4 th Quarter	43	3	1	57 minutes
Total	210	8 (3.8%)	4 (1.9%)	60.5 minutes

Comprehensive Stroke Center of Excellence in Baton Rouge, LA