

## A Guide to Commonly Used Neurosurgical Terminology

Aneurysm: a weakened portion of a blood vessel which expands in a balloon-like fashion due to pressure from constantly flowing blood. Detectable by an angiogram. Sometimes/usually unknown until it “blows” causing a hemorrhage. Risk factors include smoking alcohol, some congenital disorders, etc. Can be treated by surgical clipping or coiling.

Surgical Clipping: procedure whereby skull is removed to allow surgeon to place a clothes-pin-like clip over the neck of the aneurysm to keep blood from flowing in and therefore away from the weak walls.

Endovascular Coiling: procedure whereby a catheter and tiny platinum coils are threaded through the arterial system from the femoral artery into the site of the aneurysm where the coils are fed into the area until they form a tight enough coil to deter blood from entering and therefore away from the weak walls.

A/P: assessment and plan

ASA: aspirin. Stops the functionalism of platelets (which coagulate blood). Important to know before surgery if the patient has been on aspirin so that physician can either plan accordingly by having platelets on site during surgery, or pushing the surgery back if non-emergent.

AVM: arterial-venous malformation

BID: twice a day

BM: bowel movement

bx: biopsy

CAD: coronary artery disease

C/A/P: chest/abdomen/pelvis

CHF: congestive heart failure

CHI: closed head injury

CN: cranial nerve

c/o: complaint of or constant observation (depends on context)

Coffee Grounds: symptom on lower gastrointestinal bleed – cough contains dark, coffee ground-like sputum.

COPD: chronic obstructive pulmonary disease

Cranial Nerves: twelve in total, denoted by roman numerals. I. Olfactory II. Optic III. Oculomotor IV. Trochlear V. Trigeminal VI. Abducens VII. Facial VIII. Vestibulocochlear IX. Glossopharyngeal X. Vagus XI. Accessory XII. Hypoglossal.

Craniectomy: skull flap taken off and replaced at a later date. Patient must wear a helmet in the interim period.

Craniotomy: skull flap taken off and replaced during the same procedure.

CSF: cerebrospinal fluid. Acts as a lubrication/suspension system for the brain.

CTA: clear to auscultation (refers to lungs)

CVA: cerebral vascular accident (stroke)

cx: culture or consult (depends on context)

CXR: chest x-ray

DBP: diastolic blood pressure

DBS: deep brain stimulator

DM: diabetes mellitus

Drain: both monitors and relieves intracranial pressure due to fluid (CSF) build up.

Ventricular-Peritoneal Shunt: tubing of shunt travels from ventricle down to peritoneal cavity (trunk of the body) to release CSF from the brain. Resistance can be adjusted.

External-Ventricular Drain: tubing of drain travels from ventricle down the side of the skull (under skin but above bone) and out of the head into a sterile container.

Post-Operative Drain: external. Two types: Hemovac (lays above fascia) and JP (deeper).

Lumbar Drain: tubing of drain is placed into meninges around the spinal cord where CSF flows and works with gravity and to monitor and adjust CSF pressure.

DVT: deep venous thrombosis

dz: disease

EDA: epidural abscess

EDH: epidural hematoma (or hemorrhage). Brain bleed occurring above the outermost layer of the meninges referred to as the dura mater. Usually associated with trauma.

Encephalopathy: general term for brain illness or disease.

EOMI: extra-ocular movements intact

EVD: extra-ventricular drain

Edema: collection/build up of fluids in or around the brain tissues.

FR: fluid restriction

fx: fracture

GBM: glioblastoma multiforme. A grade IV brain tumor. Terminal diagnosis.

GERD: gastric esophageal reflux disease

GKR: Gamma Knife Radiation (Radiotherapy)

gs: gram stain

GSW: gun shot wound

Gyri: the raised portions of the brain tissue.

h/a: headache

Hematoma: blood collection surrounding the brain. Blood has escaped normal vasculature and entered brain tissue. After one week, can be relieved with Burr Holes, or immediately by craniotomy.

h/o: history of

HPI: history of present illness

HTN: hypertension

hx: history

Hydrocephalus: fluid build-up inside the ventricles. Increase accumulation of CSF either by an increase in its production or decrease in its absorption.

Obstructive Hydrocephalus: tumor or blood impeding flow of CSF through ventricles.

Progressive Hydrocephalus: can develop after hematoma, injury, surgery, etc. because cilia in the ventricles have become too damaged to absorb the excess CSF.

Congenital Hydrocephalus: born with abnormality in the way the CSF is absorbed.

NPH: normal pressure hydrocephalus. Detectable by the three W's: Wacky (mental decline), Wet (urinary incontinence), and Wobbly (gait disturbance). Symptoms improve with removal of CSF by high volume tap.

I's/O's: Ins and Outs (refers to PO intake/urine output)

ICP: intra-cranial pressure

Infarct: dead tissue.

IPH: intra-perenchymal hemorrhage

IVH: intra-ventricular hemorrhage

Ischemia: blockage of blood flow.

Laminectomy: a surgical procedure done to widen the spinal canal by removing some of the lamina (a posterior portion of the vertebrae) to relieve pressure off of the spinal cord.

LD: lumbar drain

LE: lower extremity

MAE f/s: moves all extremities full strength

MCA: motor cycle accident

Meninges: layer of protective tissue covering the brain and spinal cord.

Dura Mater: outermost layer of the meninges. Directly under the bone.

Arachnoid Mater: middle layer of the meninges. Web-like in structure.

Pia Mater: innermost layer of the meninges. Follows the contours of the tissue.

Metastases: tumors that occur in the brain after traveling from other parts of the body. Usually present a solid line of demarcation between brain and tumor tissues.

MRSA: Methicillin-resistant Staphylococcus aureus

MSSA: Methicillin-sensitive Staphylococcus aureus

MVA: motor vehicle accident

Necrosis: death of tissue.

NAD: no apparent distress

NGTD: no growth to date (refers to the microbiology)

NKDA: no known drug allergies

NPH: normal pressure hydrocephalus

NPO: nothing to be taken in by mouth. Usually an order placed before a patient's scheduled surgery

NSCLC: non-small cell lung cancer

NT: non-tender

n/v: nausea/vomiting

Nystagmus: vibration of the eyes when the ocular muscles move to their extreme. Can occur either horizontally or vertically.

OA: osteoarthritis

OD: oculus dexter. Refers to right eye.

OS: oculus sinister. Refers to left eye.

OSA: obstructive sleep apnea

OU: oculus uterque. Refers to both eyes.

PE: physical exam or pulmonary embolism (depends on context)

PERRL: pupils equal, round, reactive to light

PICC line: peripherally inserted central catheter. Tubing that enters the venous system through the periphery (arm) and ends in the large central vein (superior vena cava). Preferred over TLC (Triple Lumen Catheter) because of decreased risk in creating a pneumothorax.

PLIF: posterior lumbar intra-body fusion

PMhx: past medical history

PNA: pneumonia

PO: by mouth

POD: post-op day

PSF: pedicle screw fusion

QID: four times a day

RA: rheumatoid arthritis

RRR: regular rhythm and rate (refers to heart)

SAH: subarachnoid hemorrhage. Brain bleed occurring between the brain and the layer of the meninges continuous with the brain also called the pia mater, and the middle layer of the meninges called the arachnoid mater. Generally from an aneurysm, arteriovenous malformation, or ruptured vessel secondary to severe hypertension.

trSAH: traumatic subarachnoid hemorrhage.

Perimesencephalic SAH blood: blood is filling in gyri and sulci.

Aneurismal SAH blood: blood is filling at bottom of brain near stem. Takes more intense treatment than perimesencephalic. Two complications to look out for with this bleed are the possibility of a re-bleed, and the possibility of vasospasm, which could lead to ischemia.

SBP: systolic blood pressure

SCI: spinal cord injury.

SCLC: small cell lung cancer

SDH: subdural hematoma (or hemorrhage). Brain bleed occurring below the outermost layer of the meninges referred to as the dura mater. Usually associated with trauma.

tSDH: traumatic subdural hematoma (or hemorrhage).

cSDH: chronic subdural hematoma (or hemorrhage).

aSDH: acute subdural hematoma (or hemorrhage).

Sign: aspects of the disease, which present themselves to the medical professional and can be measured or are tangible.

Spine: composed of 32-34 vertebrae, which function cooperatively to position and stabilize the body as well as protect the spinal cord.

Cervical: the first seven vertebrae.

Thoracic: the middle twelve vertebrae.

Lumbar: the lower middle five vertebrae.

Sacral: a bottom section composed of five fused vertebrae.

Coccyx: also called the tailbone. Composed of three to five fused vertebrae.

Subluxation: term used for any joint (mostly in the neck in neurosurgery) when it has partially dislocated and is at an inappropriate angle. Occurs secondarily to a weakened ligament.

Sulci: the grooves or depressed portions of the brain tissue.

Symptom: physical aspects of the disease, which are presented verbally by the patient according to how he/she is feeling.

sz: seizure

TBI: traumatic brain injury

TcD's: transcranial dopplers

TF: tube feeds

TIA: transient ischemic attack

TID: three times a day

TLIF: trans-lumbar inter-body fusion

Tumors: irregular growth of cells. Two main concerns for brain tumors include seizures and swelling.

U/S: ultrasound

UE: upper extremity

Ventricles: cavernous space in the brain containing CSF.

Slit Ventricles: ventricles appear collapsed because of an absence of CSF and/or high intracranial pressure. Patients usually present with headache, and/or nausea, vomiting, confusion, and agitation

VIR: vascular interventional radiology

VPS: ventriculo-peritoneal shunt