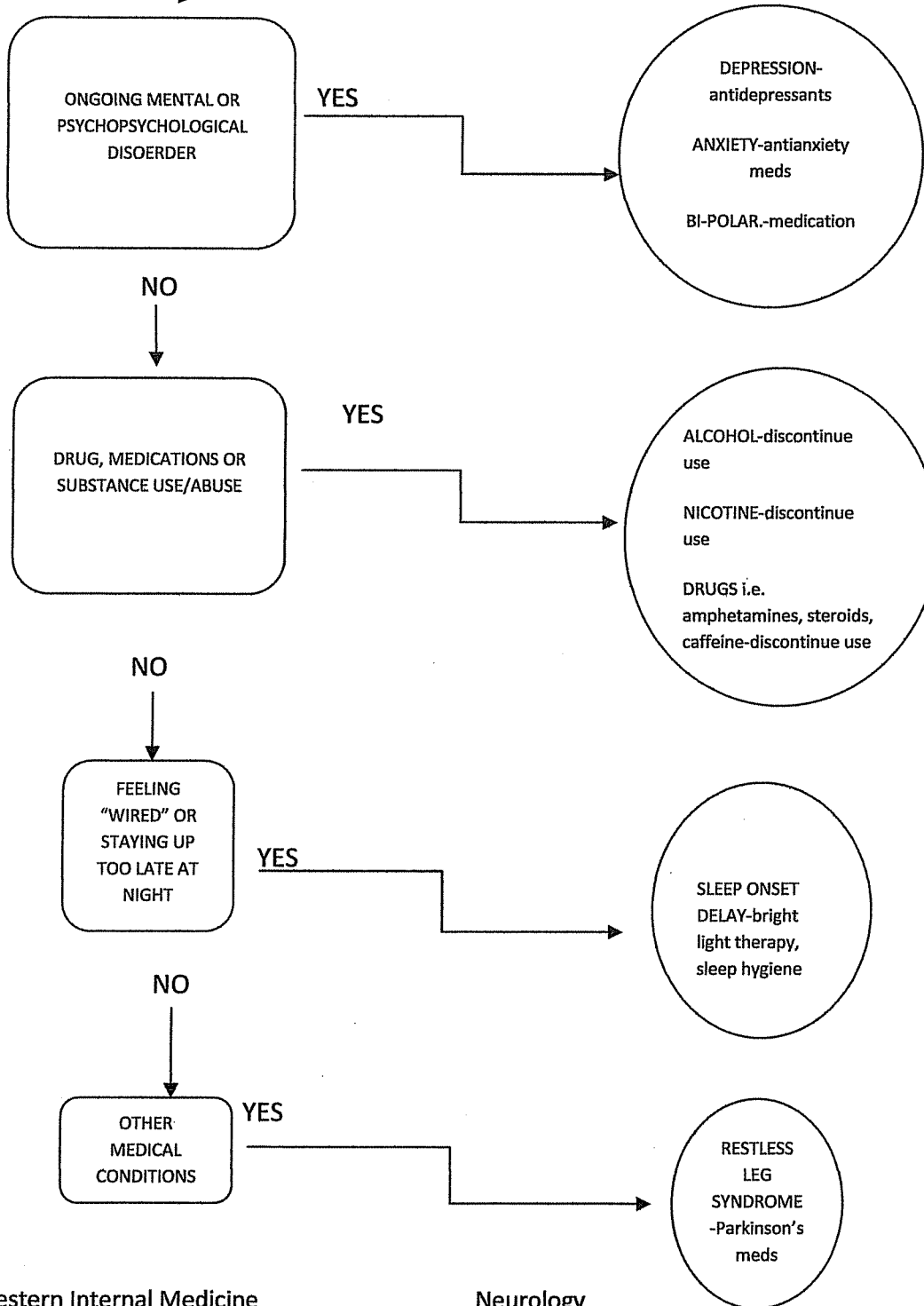


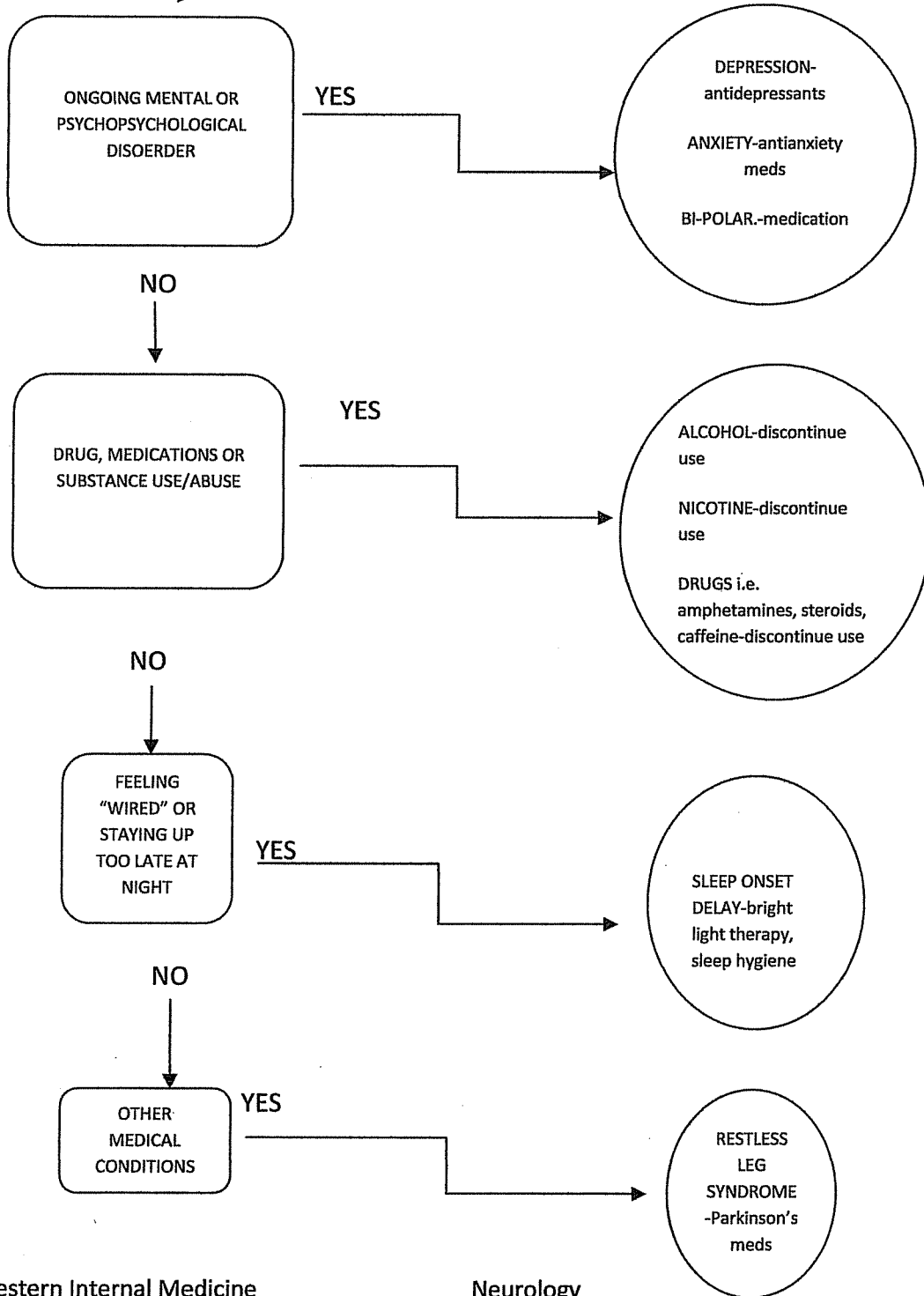
ALGORITHM #1

INSOMNIA

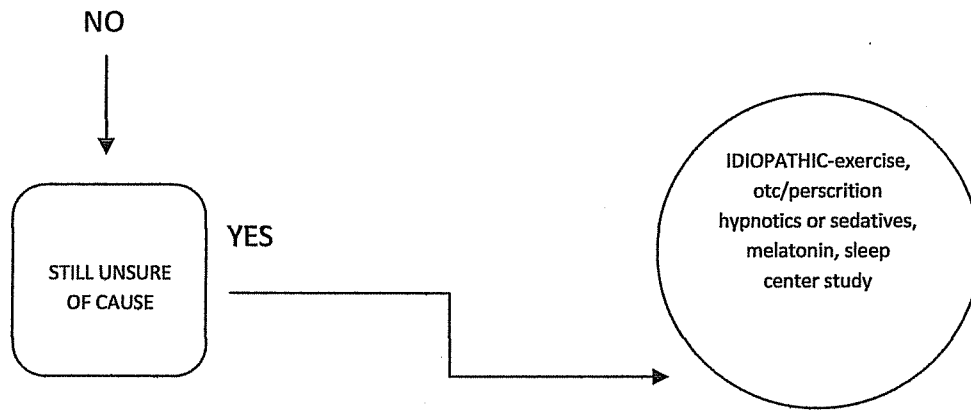


ALGORITHM #1

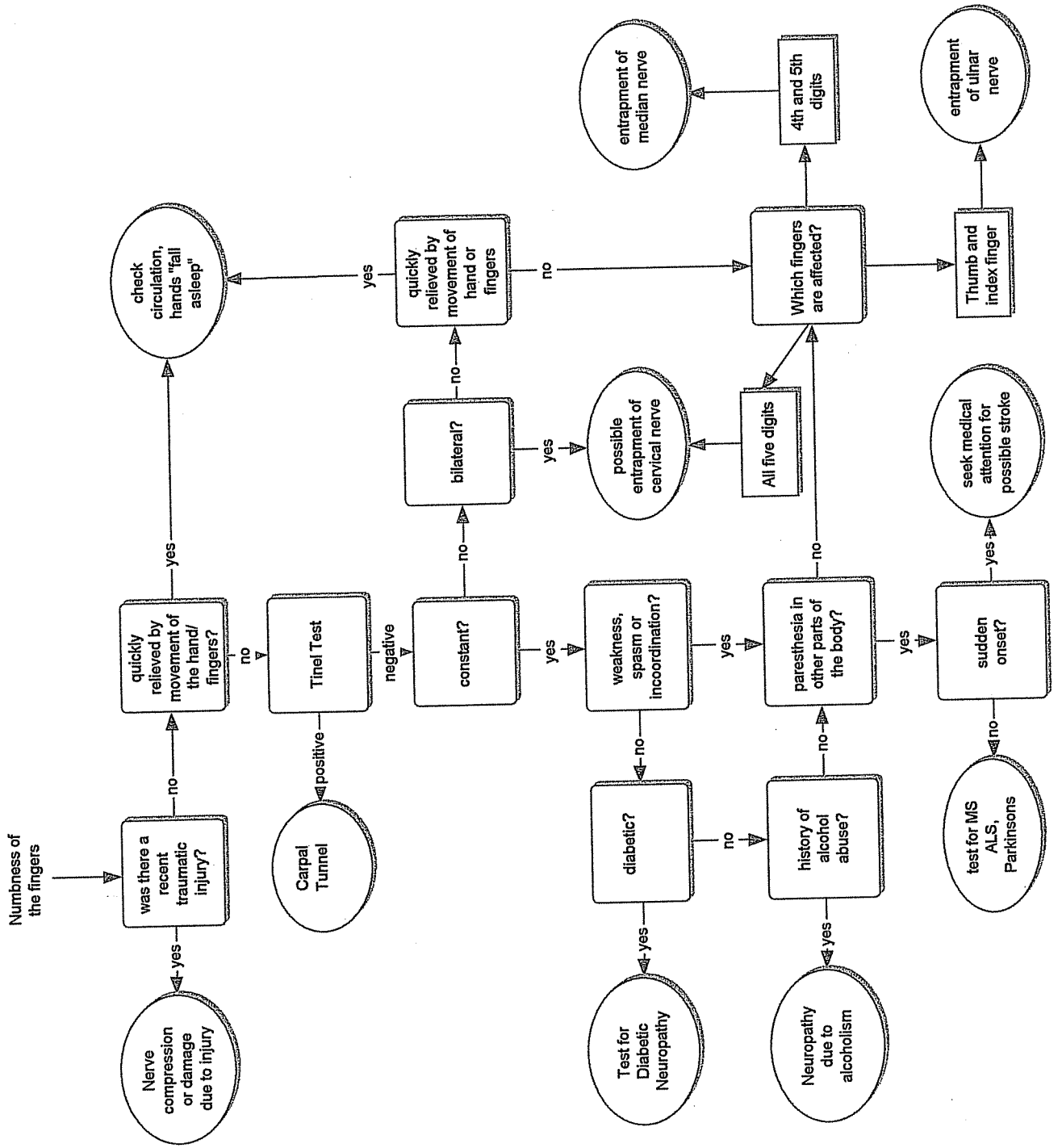
INSOMNIA

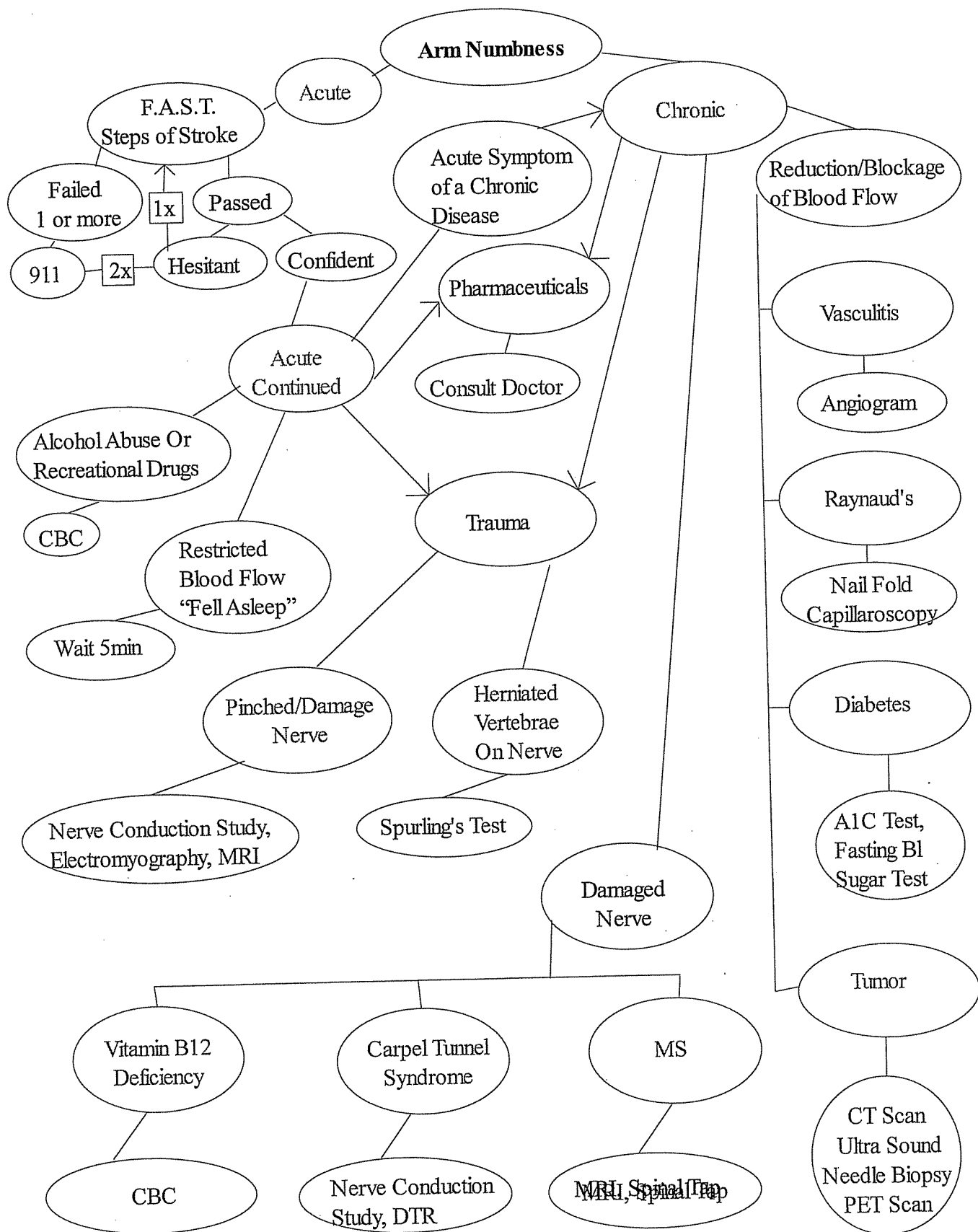


ALGORITHM #1



Neurology Algorithm

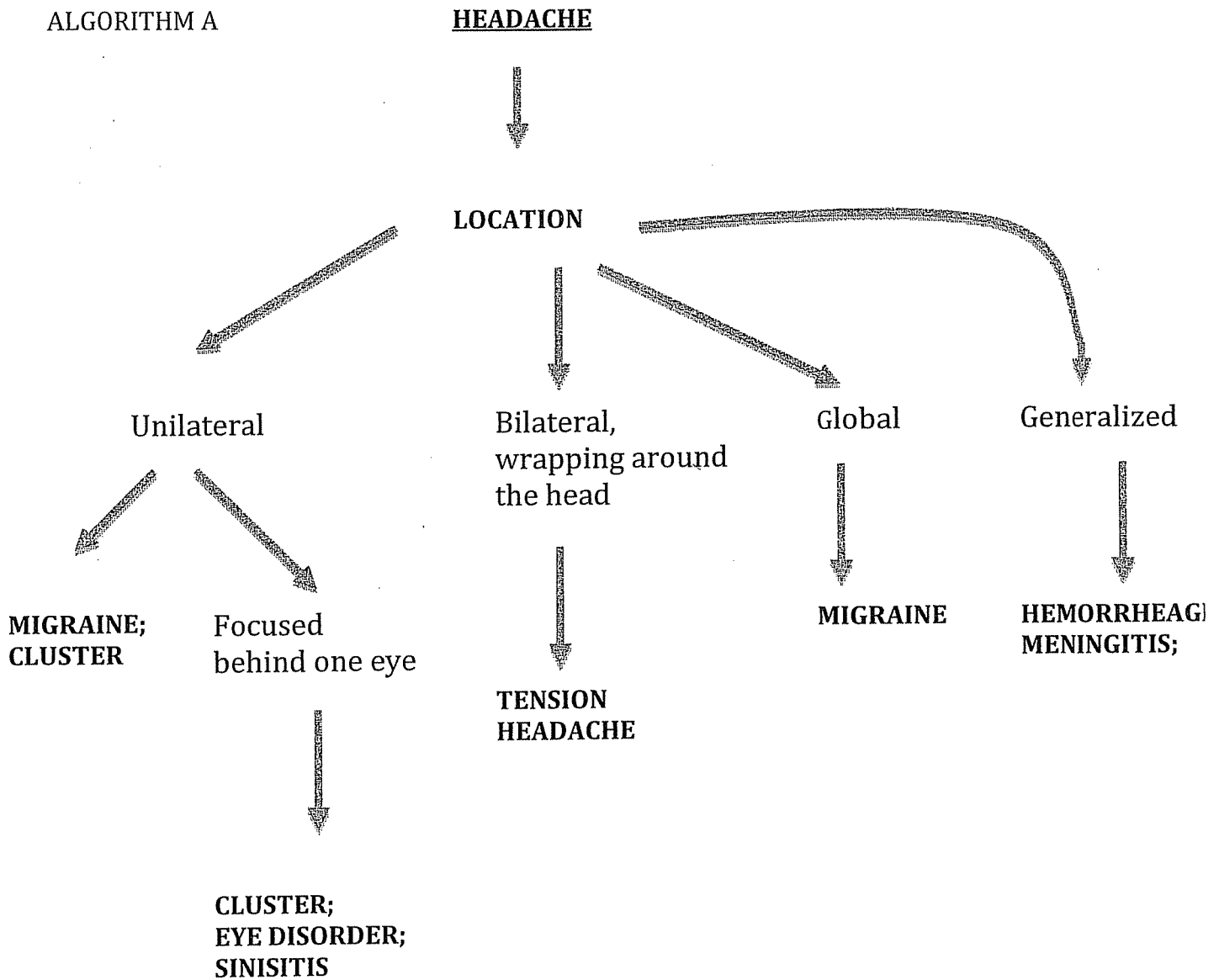




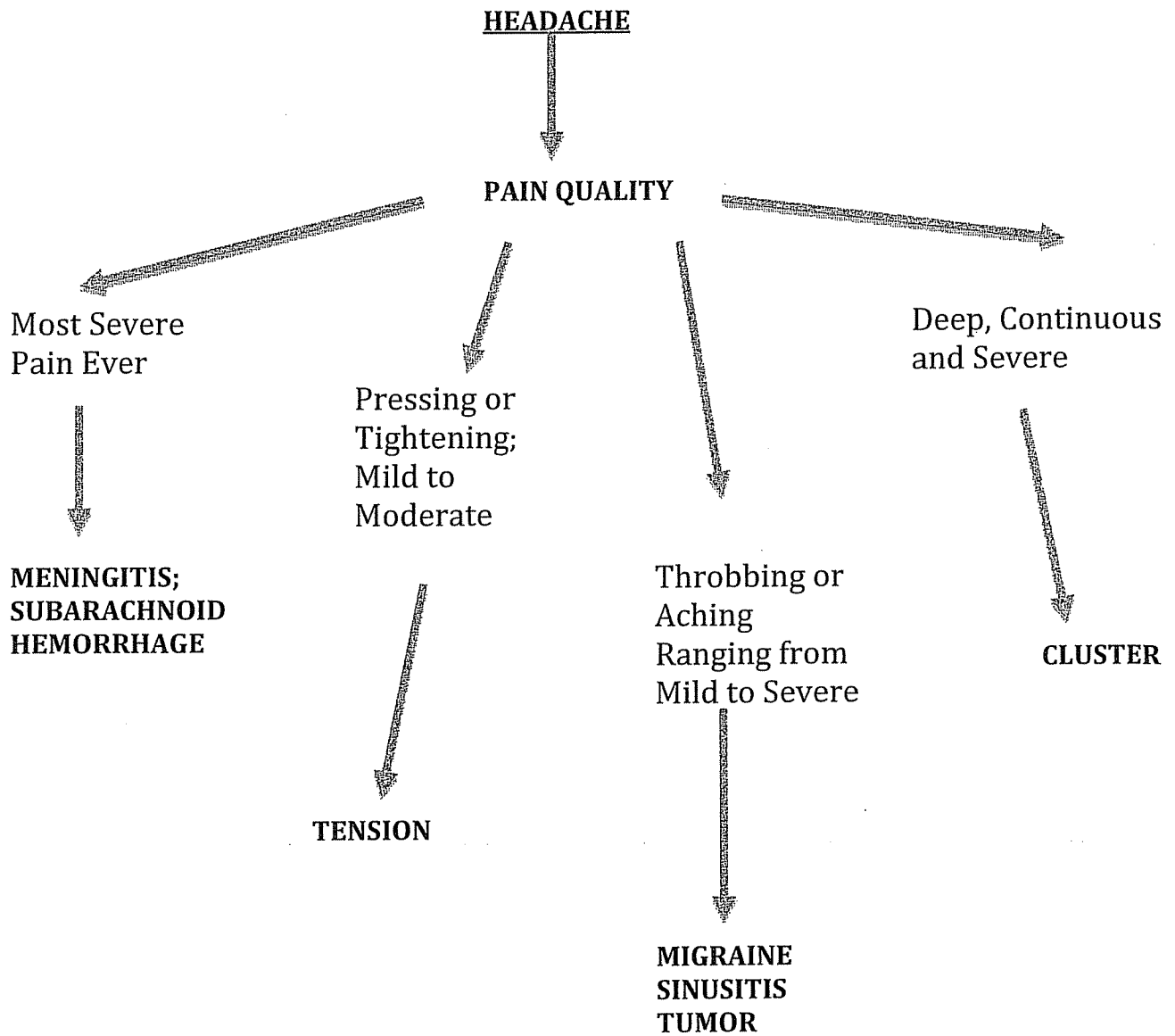
HEADACHES

The first thing to check is to assure the headache is not due to an acute injury or due to a stroke. Ask the patient if they experienced a fall or an injury to the head. If yes then send to ER because there may be bleeding over the brain. If a stroke is suspected there should be other signs and symptoms, ask your patient to 1. Say a complete sentence, 2. Ask the person to raise their head above their head, 3. Ask the patient to walk around the room. If any of these findings are unusual send patient to the ER immediately. The following is a guide to typical signs seen with headaches.

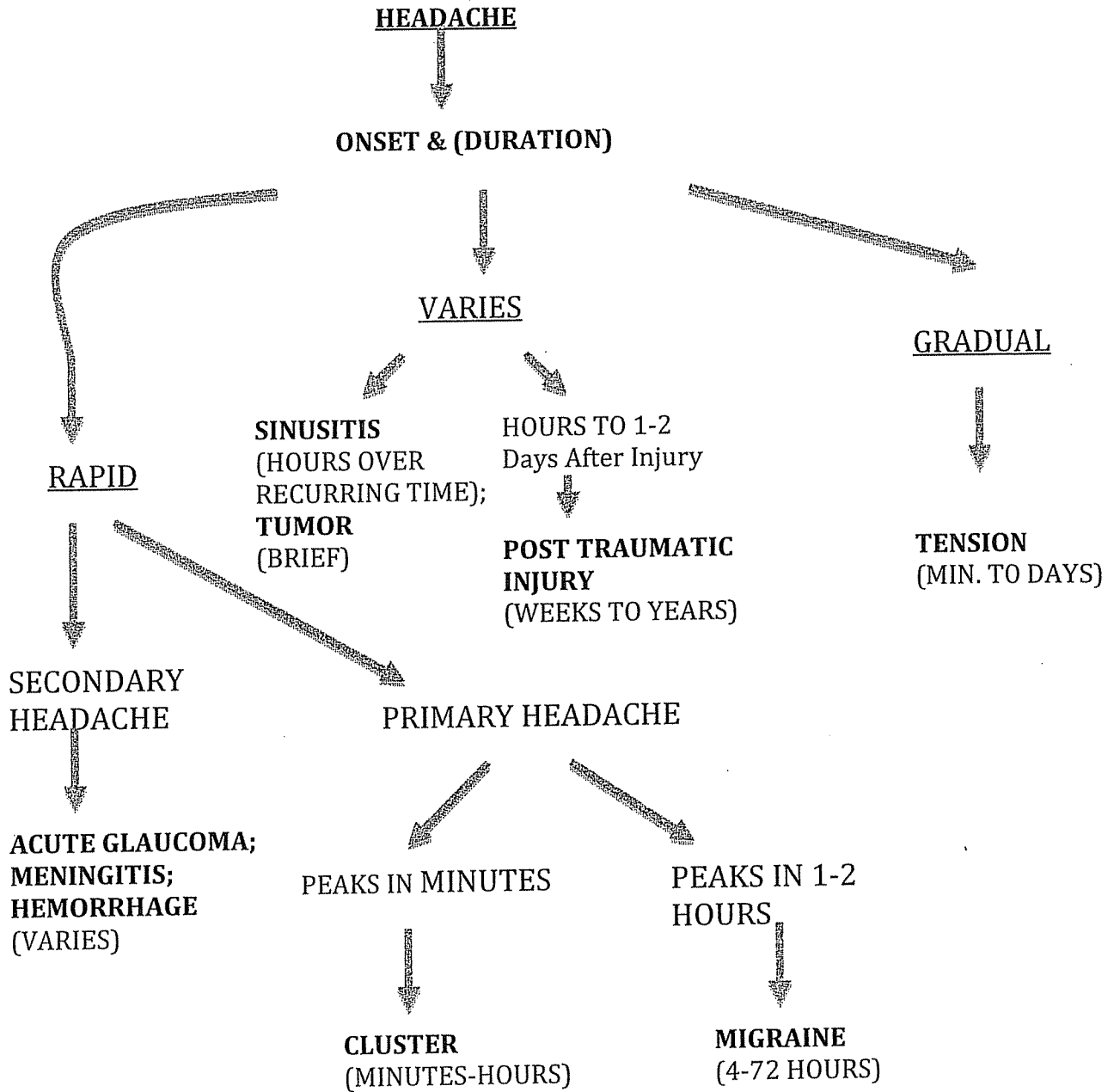
ALGORITHM A



ALGORITHM B



ALGORITHM C



ALGORITHM D

HEADACHE

Key
Accompanying
Symptoms

PRIMARY HEADACHES

TENSION

CLUSTER

MIGRAINE

- MID-AFTERNOON
- NO NAUSEA
- MAYBE LIGHT OR SOUND SENSITIVE

- NASAL DISCHARGE
- LACRIMATION
- CONSTRICTION OF PUPIL
- CONJUNCTIVITIS
- EYELID EDEMA

AURA

No Aura

- Seeing lights or Zig Zags
- Double vision
- Nausea
- Aphasia
- Numbness or Tingling

- Sound and Light sensitivity
- Nausea
- Vomiting

From acute red flag emergencies to sub acute situations

LOSS OF MEMORY ALGORITHM

Loss of memory with

- numbness or weakness in your face, arm, or leg, especially on one side
- confusion or trouble understanding other people
- trouble speaking
- trouble seeing with one or both eyes
- trouble walking or staying balanced or coordinated
- dizziness
- severe headache that comes on for no known reason

signs of **Stroke or TIA** or serious

neurological conditions and should be treated as

medical emergencies

No, then rule out

Memory loss (amnesia), impaired short-term or long-term memory with sudden change in mental functions

Loss of consciousness, poor responsiveness, stupor, coma

Muscle weakness or paralysis

Seizures

Exposure to viruses and viral infections or bacteria infections

Coxsackievirus, Echovirus, Poliovirus, Adenovirus Cytomegalovirus, Eastern Equine Encephalitis Virus,

Epstein-Barr virus, Herpes simplex infection, Mumps, Rabies, Varicella and/ or West Nile virus

Lyme disease, Syphilis and/ or Tuberculosis

And symptoms of Clumsiness, unsteady gait, confusion, disorientation, drowsiness, fever, headache, irritability or poor temper control, light-sensitivity and/ or stiff neck and back (occasionally), vomiting

signs of **Encephalitis**

medical emergency

signs of **Encephalitis**

Acute or sub acute red flag

Still No, consider

Loss of memory with

New onset or change in pattern of headaches

Headaches that gradually become more frequent and more severe

Unexplained nausea or vomiting

Vision problems, such as blurred vision, double vision or loss of peripheral vision

Gradual loss of sensation or movement in an arm or a leg

Difficulty with balance

Speech difficulties

Confusion in everyday matters

Personality or behavior changes

Seizures, especially in someone who doesn't have a history of seizures

Hearing problems

No- then what about memory loss from

Drug use such as barbiturates or benzodiazepines

Electroconvulsive therapy (especially if it is long-term)

General anesthetics such as halothane, isoflurane, and fentanyl

Head trauma or injury anterograde amnesia - sometimes also follows head trauma - is a component of TGA

Seizures or epilepsy (with falls)

Alcoholism

possible **Brain tumor**

Sub acute red flag

possible causes of **Brain damage**

Still No- Age, not aging may play a role

(Normal aging may require a longer time to remember learned material, but, it does not lead to significant memory loss unless diseases are involved.)

Language problems, such as trouble finding the name of familiar objects

Misplacing items

Getting lost on familiar routes

changes and loss of social skills

Losing interest in things previously enjoyed, flat mood

Difficulty performing tasks that used to come easily

Alzheimer's disease Personality

Nutritional problems (vitamin deficiencies such as low vitamin B12) can cause memory loss and is more common in elderly folks.

A move to a new location

Anxiety

Death of a friend, family member, or pet

Divorce

Fear

Hospitalization

Loss of trust

Pain

Physical injury or illness

Terrorism or mass disaster

Violence or war

All is ruled out -consider recent events should rule in

Depression or emotional trauma

Types of amnesia

recall of recent events vanish

draw a blank when asked to remember things that happened a day, a month or even a year ago about 50- 60 years old

do remember who they are and recognize the people known well

migraine headache sufferers

last only 2 to 24 hours with more confusion

memory loss of recent experiences

long term memory persist

often ask questions and, after receiving a response, immediately ask the same question again

person can remember events that occur after the head trauma, but not before

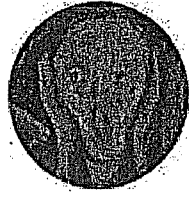
Transient global amnesia

hypotheses and evidence of small strokes and local evidence of minor depressions on the surface of the brain. As well as blood is reduced to the temporal region of the brain during Valsalva, or weight-bearing movement.

Anterograde amnesia

Retrograde amnesia

Facial Neuritis



Western Internal Medicine

Unable to control certain facial muscles, sometimes losing complete sensation where the nerve is and face may become lopsided or appear unsymmetrical because of loss of muscle and nerve function in the face-----YES---->-----
-----Facial Neuritis

Burning feeling on the face that may become so bad that the area is on fire and certain movements and activities make the burning sensation worse----YES---->--
--Facial Neuritis

NO?

Facial paralysis following a stroke-----YES---->-----Central facial Paralysis

NO?

Facial paralysis due to injury of peripheral nerves alone without stroke also called idiopathic facial nerve paralysis and caused by a viral infection(herpes)from sometime in the past. Unilateral acute paralysis of facial muscles which involves all muscles including the forehead. There may be numbness or pain in the ear, face, neck or tongue. May be a change in hearing sensitivity. ---YES—Bells Palsy

NO?

Facial paralysis with sensitive hearing----->-----Yes-----Hyperacusis

NO?

Paradoxical paralysis of face-----YES---->-----Synkinesis

No?

Central facial paralysis caused by vascular disease--->-----YES-----Tumor

NO?

**Headaches, seizures and or hearing loss from central facial paralysis-----YES-->
Brain Tumor gradually developing**

NO?

**Facial paralysis along with headache, chills and fever, muscle and joint pain,
fatigue, swollen lymph nodes and a red rash that resembles a bulls-eye-----YES->
----Lyme Disease**

Facial paralysis in newborn-----YES----->-----Caused from Traumatic birth

NO?

**Irritated optic with stabbing pain-----YES----->-----Optic
Neuritis**

NO?

**Pain in the facial region including the forehead, nose, sinuses, cheek, lips, teeth
and jaw and usually one sided. Pain is paroxysmal, lightening, electric shock like
and lancinating.-----YES----->Trigeminal Neuralgia (TN)**

**Facial pain encompassing a wide group of facial pain problems which can have
many different causes but symptoms are all similar. Symptoms include burning,
aching or cramping and usually on one side of the face and often in the region of
the trigeminal nerve and may extend into the upper neck or back of scalp-----
YES----->---Atypical Facial Pain (ATFP)**

NO?

**Twitching of the face or dryness of the eye or mouth or alteration of taste on the
affected side----->---YES-----Facial nerve problem
which may result in facial muscle paralysis or weakness of the face.**

NO?

**May be caused by a facial tumor, or a stroke or an inner ear infection left
untreated. Can be caused by degenerative cerebral disease Guillane Barr
syndrome or certain other diseases which affect the nerves and associated
tissues.-----YES----->Neuritis Symptoms**

NO?

ARM NUMBNESS

