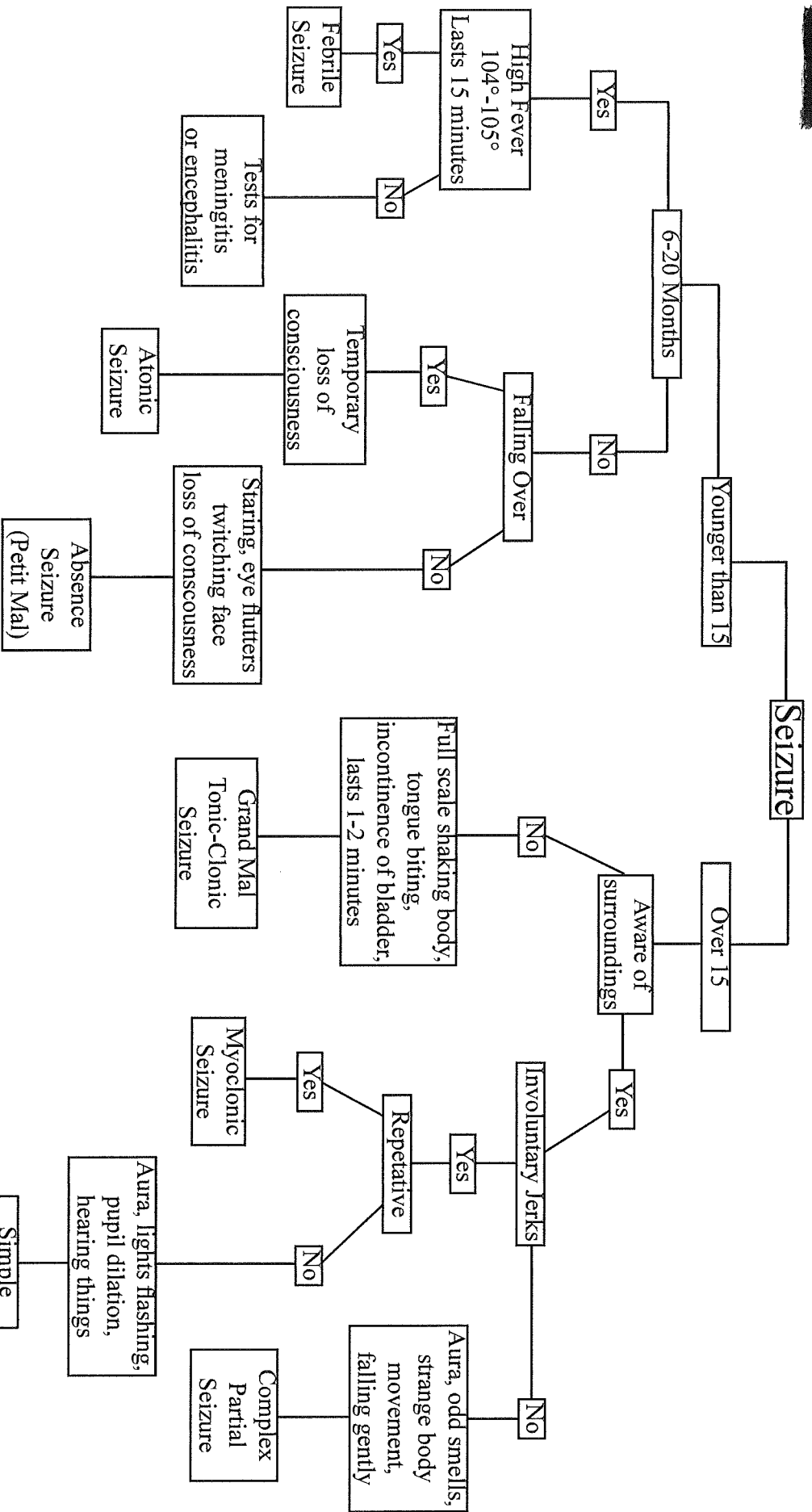


# **ALGORITHMS**

**FALL 10**



Diagnosis - To help diagnose which seizure is occurring there needs to be an eyewitness. Also an EEG shows abnormalities. MRI scans and blood tests also help to differentiate.

Treatment - Antiseizure medication such as phenytoin, phenobarbital, primidone and others. Surgery may be used to find tumors, abscess, lesion, or vascular malformation. For children a ketogenic diet and fasting. A ketogenic diet consists of mostly fats and avoidance of carbohydrates.

# Diarrhea

## 3 Types of Diarrhea

### Acute, noninflammatory diarrhea

Loose or watery stools  
No blood or pus  
No abdominal pain  
No fever  
Profuse  
Sudden onset but last only a few days  
One or more liters per hour

Causes are Norwalk virus, rotavirus, certain bacteria such as Staphylococcus aureus, Clostridia, E. coli and cholera.

Giardia lamblia and Cryptosporidium is also seen in 3rd world countries or in AIDS patients.

### Acute inflammatory diarrhea

Fever  
Passage of blood  
Pus and abdominal pain  
Bleeding from colonic wall inflammation with ulceration.  
Amount is less than noninflammatory  
Patient is toxic and very sick.

Causes of inflammatory diarrhea are Cytomegalovirus, Protozoal amebiasis, Bacterial such as dysentery, typhoid fever, E. coli, and the plague.

### Chronic diarrhea

Please look to page 2 for the types of chronic diarrhea

Stool cultures taken after 24 hours or unusually severe diarrhea

Treatment: Rehydration with IV that contains glucose, electrolytes, and bicarbonates  
Pepto-bismol 2 tablets four times a day helps travelers diarrhea.  
Imodium can be used for noninflammatory cases.  
-Can cause intestinal perforation in inflammatory cases.  
Probiotics can be used for the treatment of children.  
Antibiotic therapy can be used for patients with cholera and all forms of inflammatory diarrhea.  
Flagyl is used in protozoal infections and Giardia

**Osmotic diarrhea:**  
Watery profuse stools  
Caused by over use of laxatives or antacids.  
Also known as fictitious diarrhea.  
Patient may be trying to get attention or sympathy

**Secretory diarrhea:**  
Blood vessels in the lining of the small and large intestine secrete water and salt into stool.  
This is caused by toxins in blood.  
Castor oil and rare tumors such as carcinoid and VIP tumors.

**Exudative diarrhea:**  
Intestinal lining that is inflamed, engorged with blood, and ulcerated. Proteins, blood, mucus, and pus cause the diarrhea.  
Causes can be from ulcerative colitis, Crohn's disease, tuberculosis and lymphoma of the gut

**Rapid-transit diarrhea:**  
Watery stool that has left the intestines too quickly before absorption.  
Drugs such as magnesium, prostaglandins, caffeine, serotonin cause diarrhea.  
Also surgery for obesity and Hyperthyroidism are causes of diarrhea

**Bacterial or fungal overgrowth diarrhea**  
The balance of bacteria in the intestines is altered from the use of broad-spectrum antibiotics. The bacteria that help with the absorption and flow of stools are affected causing diarrhea.

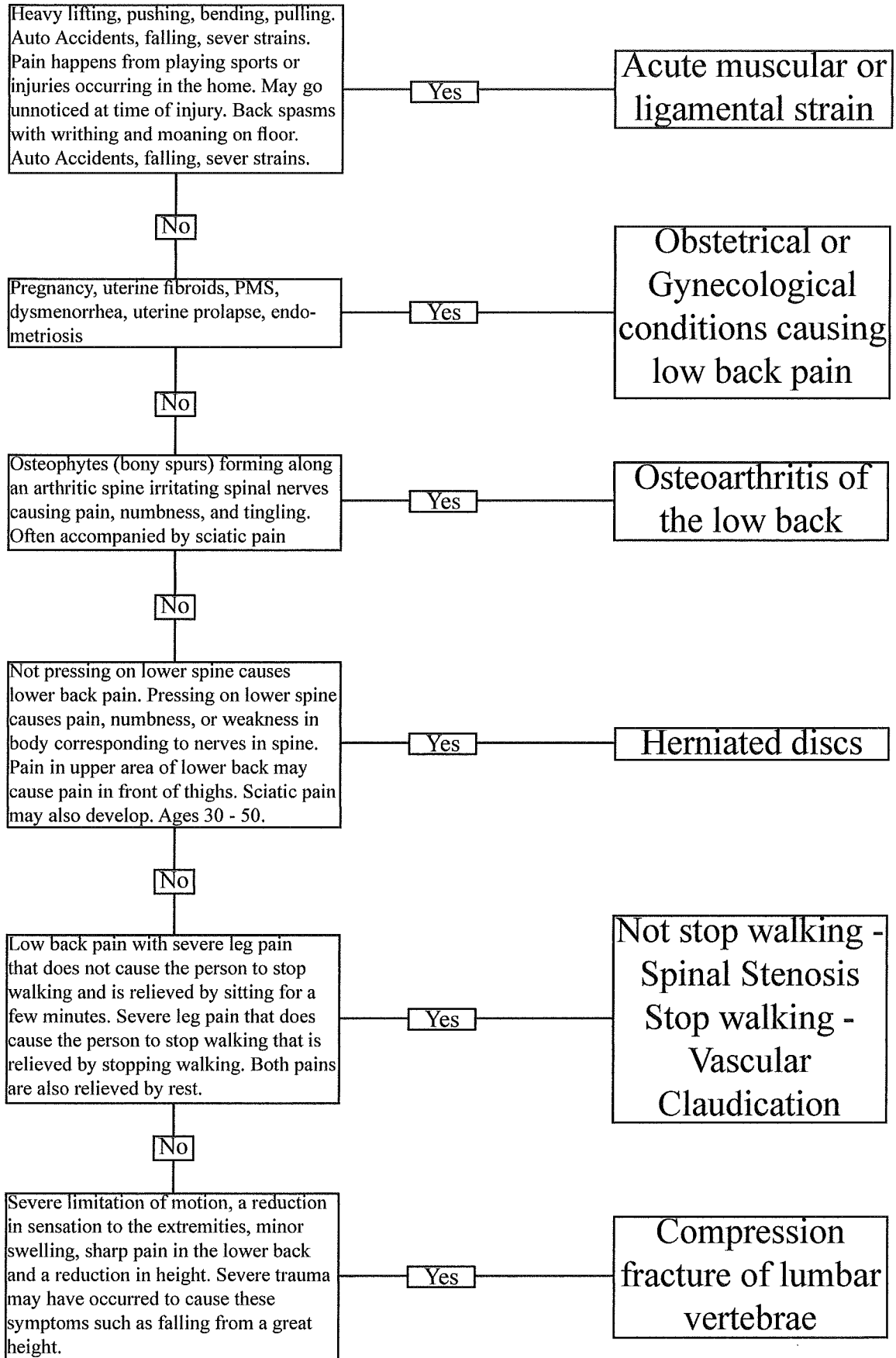
**Malabsorption syndromes:**  
Intestines are unable to digest properly. Fats and carbohydrates are undigested and stay in the large intestine.  
There are different types:  
**Nontropical sprue (Celiac's)**  
Inherited, gluten and rye react with antibodies to flatten mucosal vilae and not absorb food.  
Symptoms include: bloating, pale, bulky, frothy, floating and foul-smelling stools.  
Treatment: Stop eating glutens  
**Pancreatic insufficiency**  
Caused by alcoholism, mumps, or post-pancreatic resection causing irregular pancreatic enzymes  
**Whipple's disease**  
Rare occurrence in middle-aged men  
Caused by bacteria T. whippelii which also causes memory loss, arthritis and heart valve problems  
**Malabsorption**  
Removal of portions of small bowel due to surgery from GI cancer, obesity or Chrohn's disease lead to malabsorption syndromes

Diagnosis: History and physical findings are important.  
Such as traveling, change of diet, bloody versus non-bloody, and length of time can help to differentiate between the different types of diarrhea.

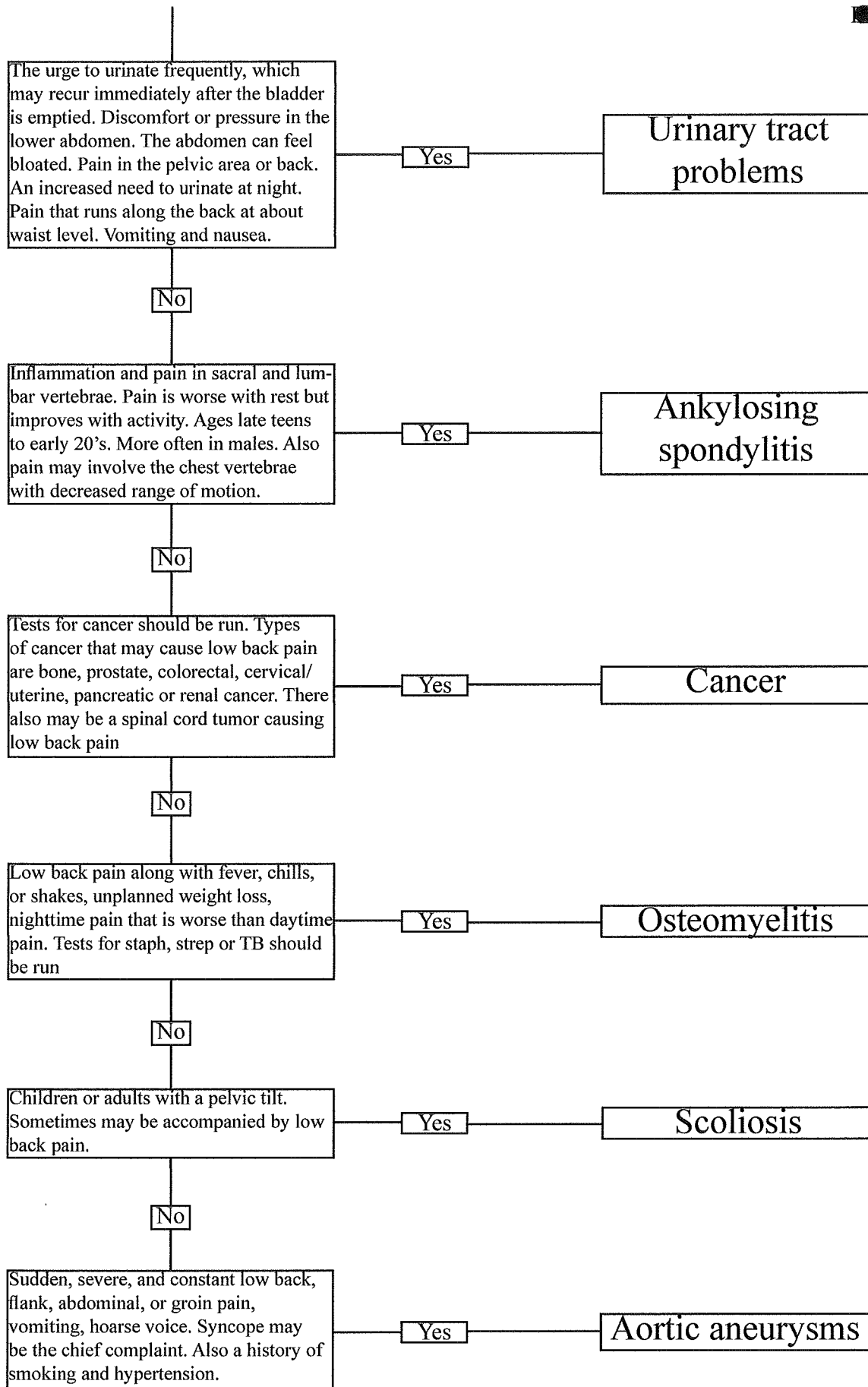
Tests: Stools are checked for ova and parasites three times. Also known as an O&PX3.

Treatment: Stopping of cause such as caffeine, wheat, magnesium antacids. Taking treatments of antibiotics, opioid antidiarrheal, and tincture of paregoric. Also psyllium, Kaopectate, and paradoxically are used for constipation but could help bulk up stools.

# Low Back Pain



See next page



See next page

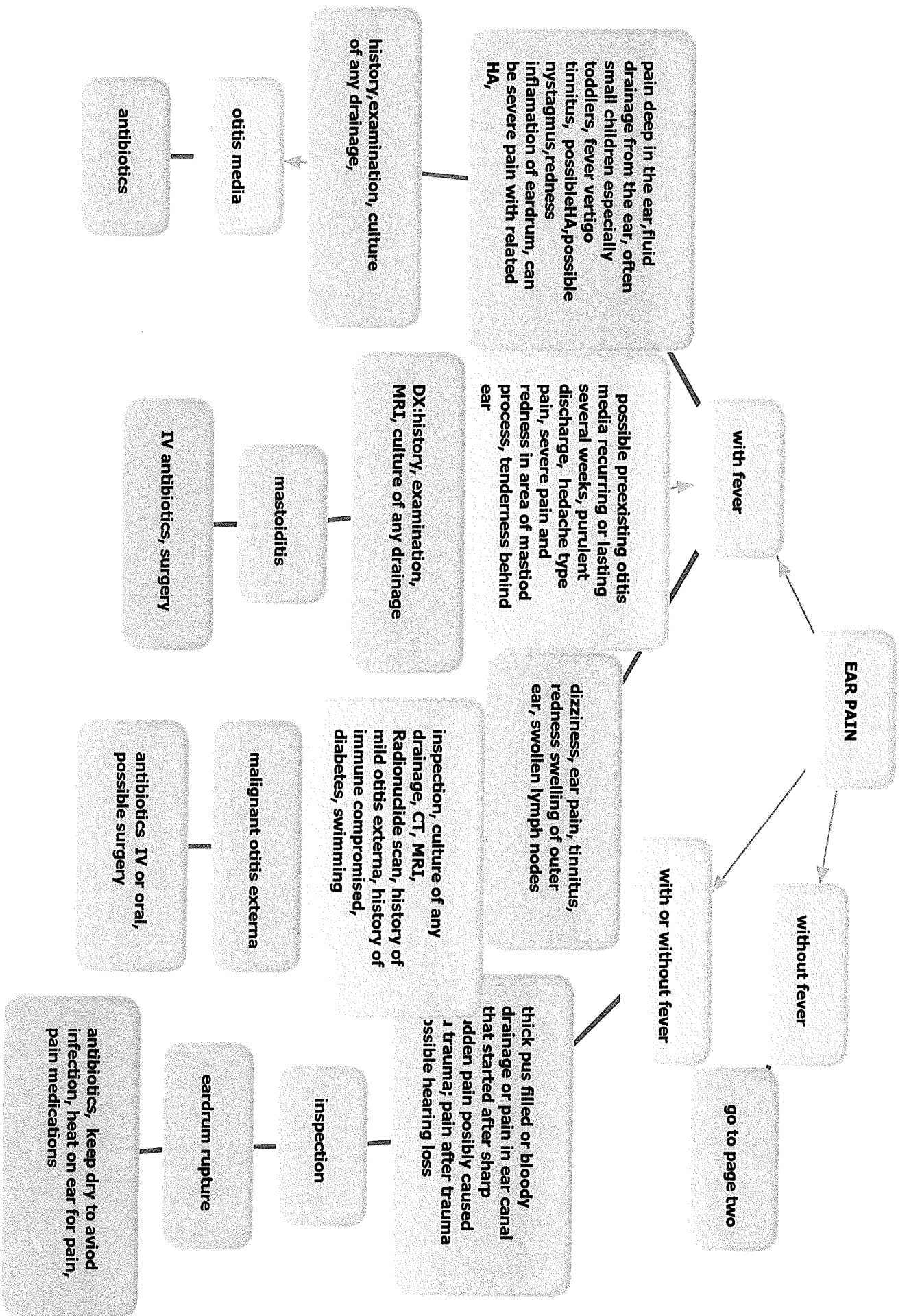
Diagnosis - To help diagnose the correct type of lower back pain we should look at the patients history. What happened before the pain started? How long has the patient been experiencing the pain? How old is the patient and what gender are they? The type of pain such as severe, dull, sharp is helpful. Also what accompanying symptoms are occurring with low back pain.

Physical Exam - Points to remember while taking a physical exam of the patient.

- Where they pain is located.
- Local Tenderness.
- Pain with movement.
- Swelling or deformity.
- Do a straight leg raising test. Check for sciatic nerve irritation.
- Should a neurological exam be used.
- Should an abdominal exam be used.
- Rectal exams for persons over 50.

Treatment - Bed rest for a day or two can help in the recovery. But only for a short time to help get over the most severe pain. After this the muscles will need to be worked to help recover. NSAIDs are helpful. Alleve is safer than Motrin and COX2 inhibitors are being used more often. Muscle relaxers such as Robaxin and Soma can be used with patients suffering from back spasms as well as low back pain.

Physical therapy can be very helpful for some patients. Heat therapy can increase blood flow and relieve joint stiffness. Heat packs for superficial and hot baths for the interior can relieve some of the pain. In some patients a cold therapy can work just as well.





**Without Fever**

itching or pain when pull on ear or press on tragus, redness, poss some drainage clear odorless

ENTER

TAB

history of swimming, Hx of putting things in ear, exam, possible drainage culture

otitis externa or swimmer's ear  
**ATTENTION** if untreated especially for the immune compromised or diabetic can become acute or malignant

topical antibiotics, topical steroid for pain, with possible ear wick

jaw joint cracks clicks pops or grates when chew or open mouth, tenderness or pain in jaw, dull aching pain of the face, headache especially in the morning, hearing loss, tinnitus, shoulder neck pain

history of systemic abnormalities such as arthritis, ankylosis; trauma, dental abnormalities, developmental abnormalities, neoplasia

Temporomandibular joint disorder

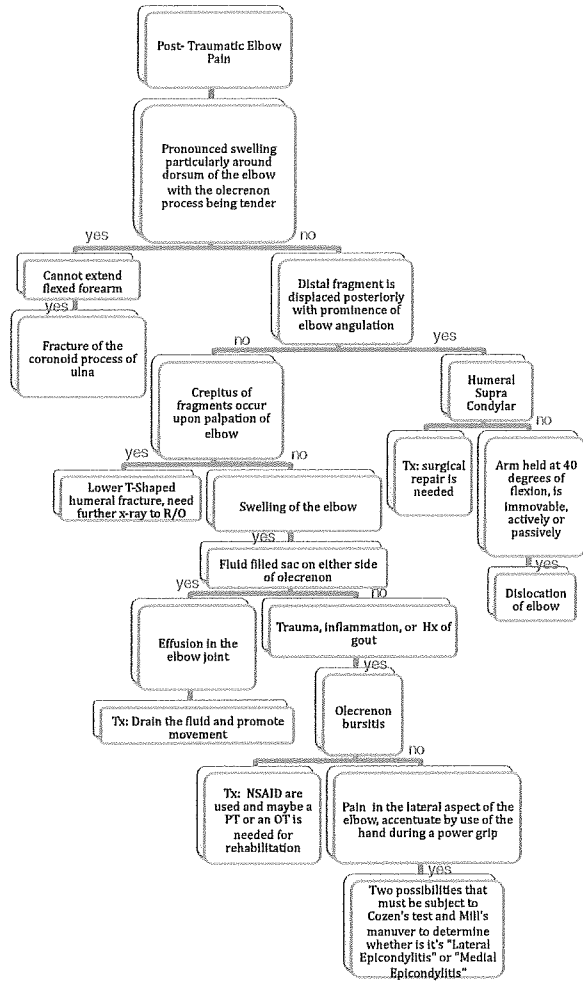
Treat underlying condition

small pimple in the ear pain when touching the outside of the ear more severe pain when touching er canal

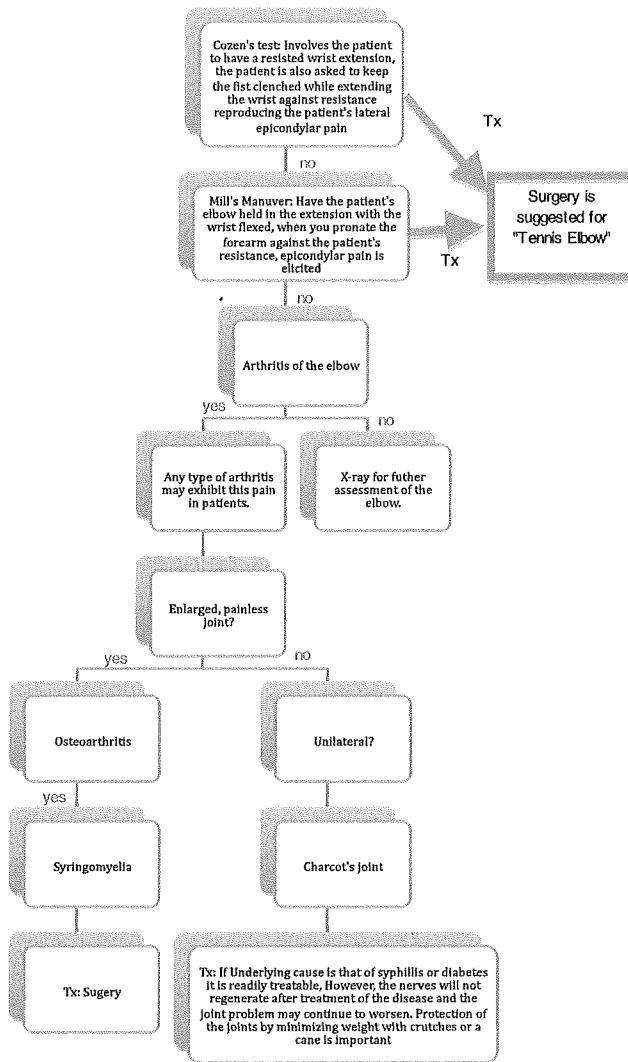
inspection, history

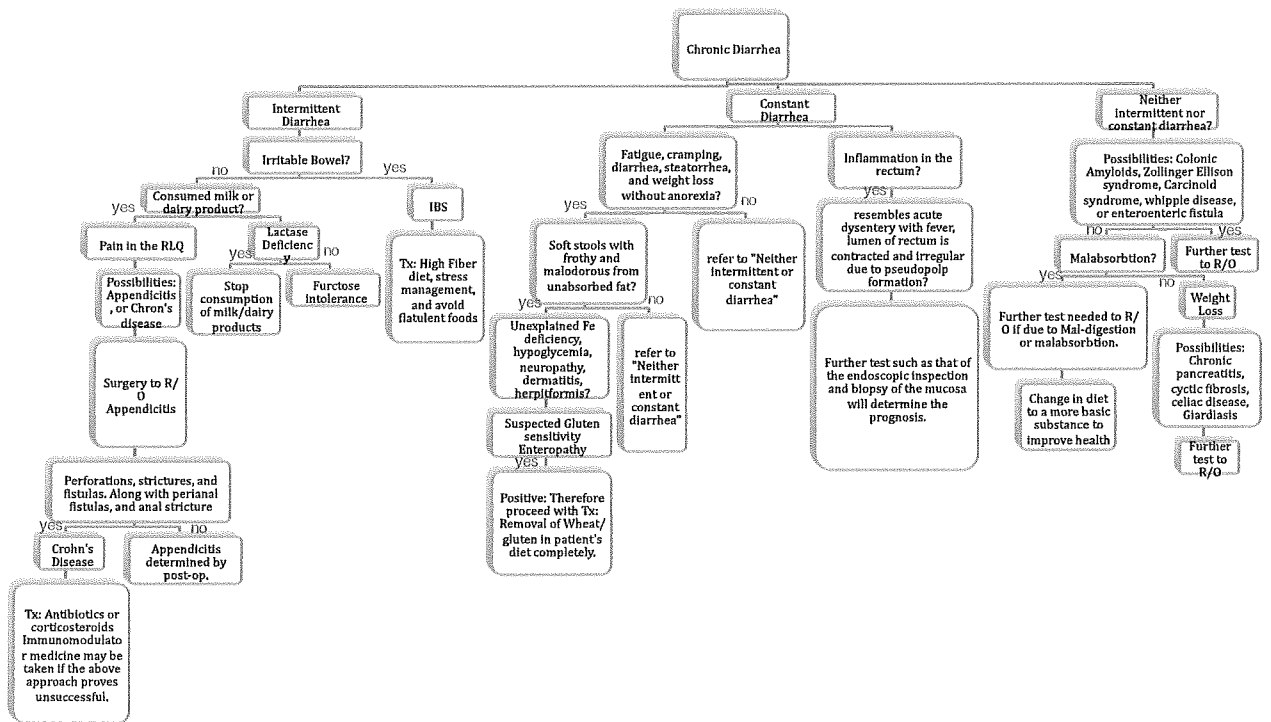
small infection in the ear

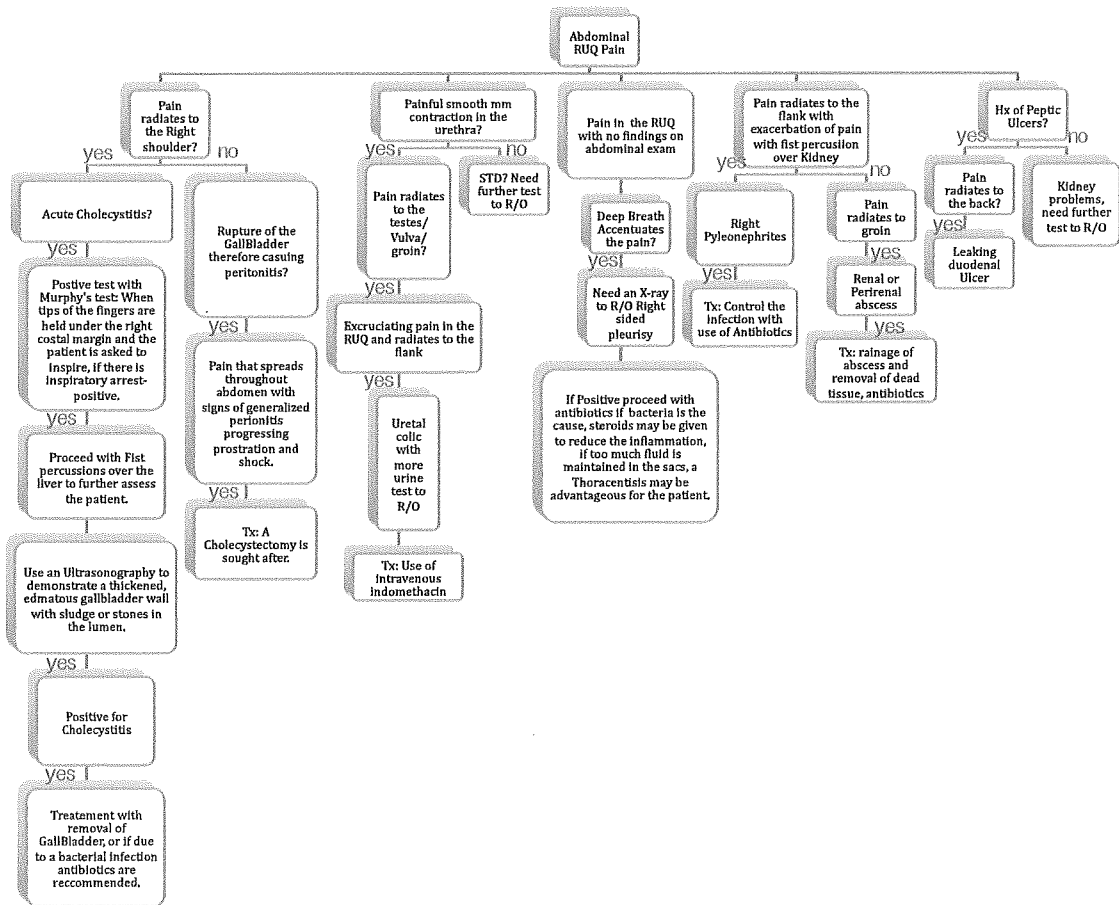
will probably heal on its own after 2-3 days, pain medication, heat packs, if it gets worse or hearing affected more aggressive treatment



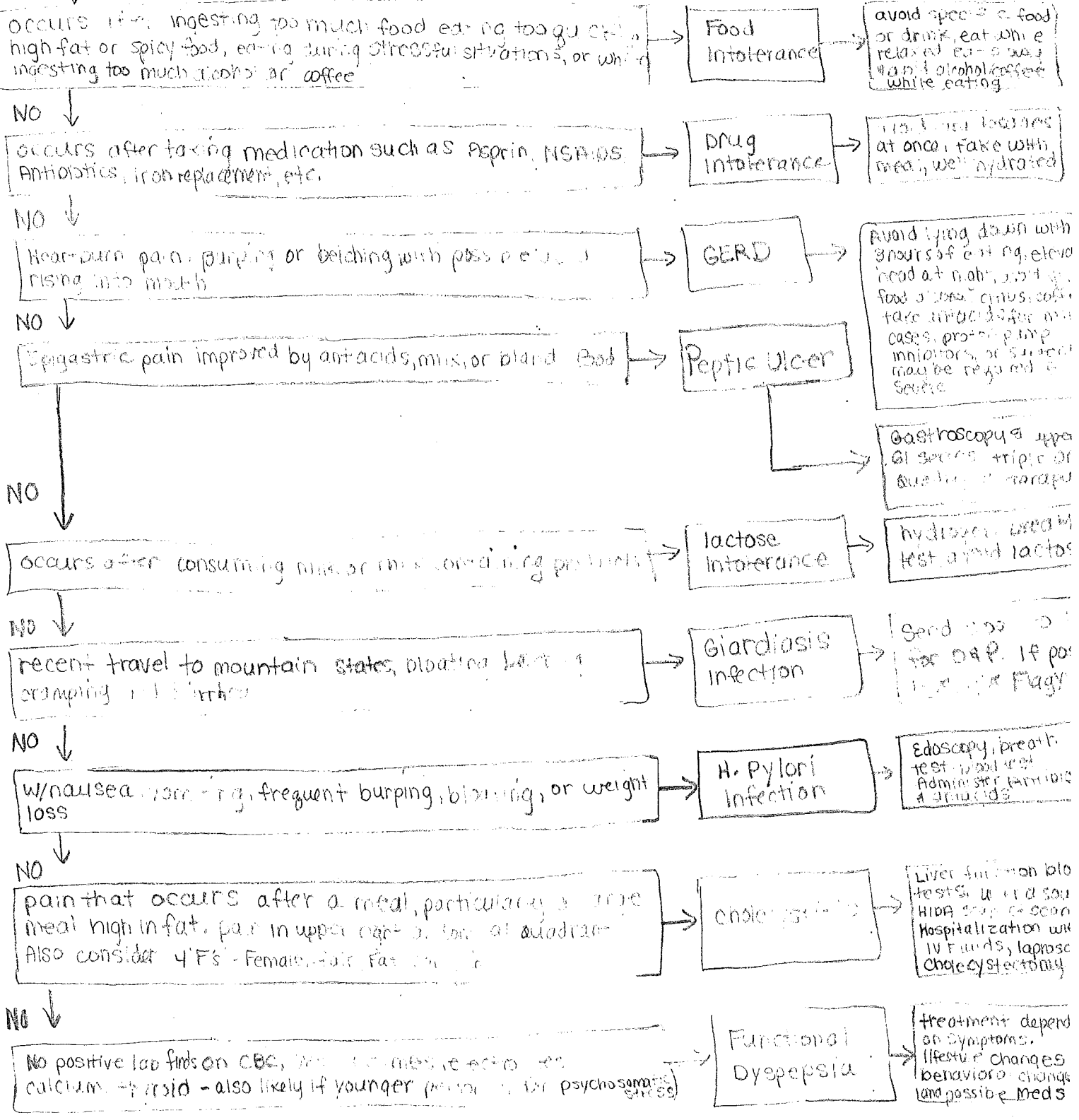
Continue on  
Page 2





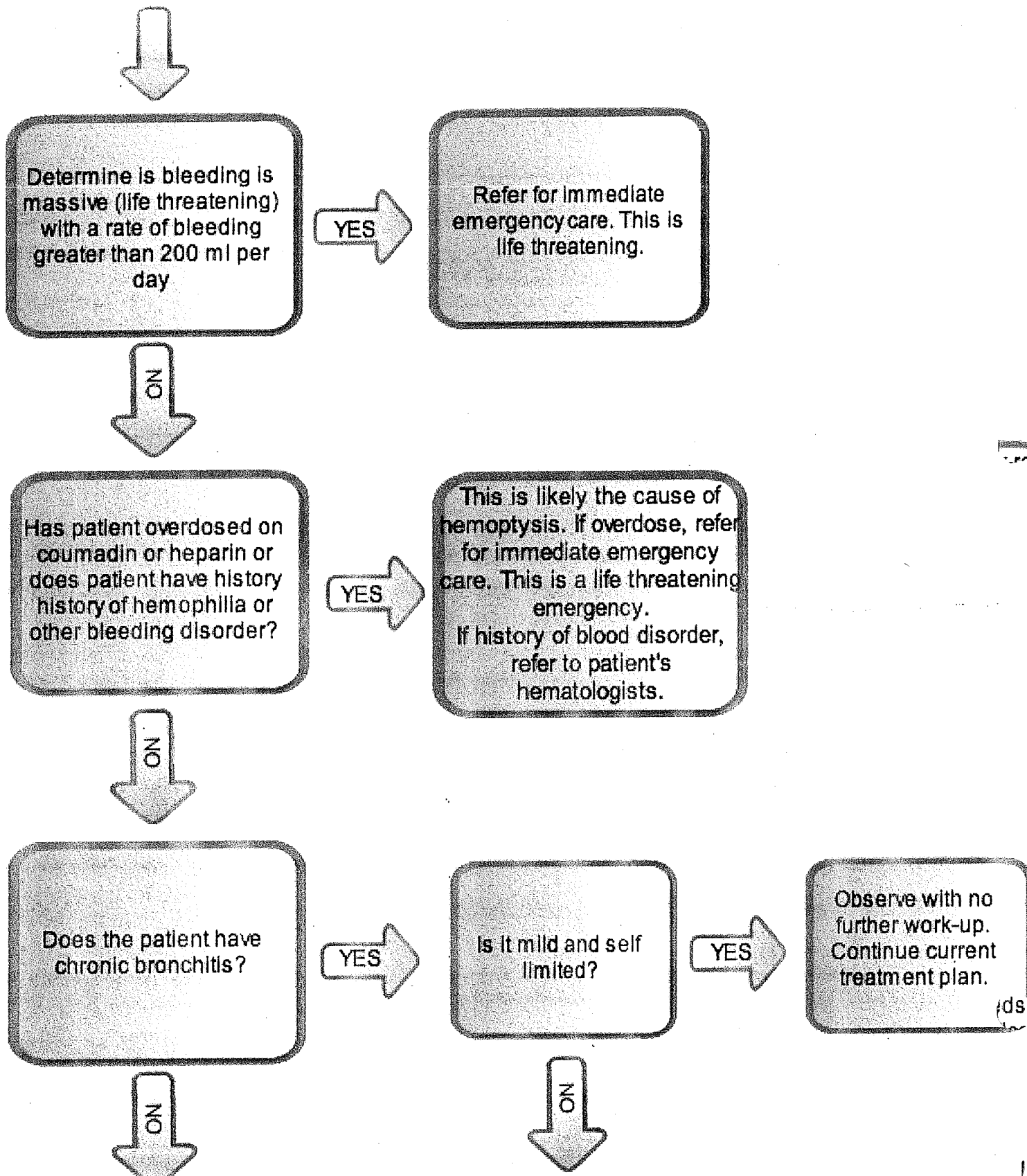


# Dyspepsia

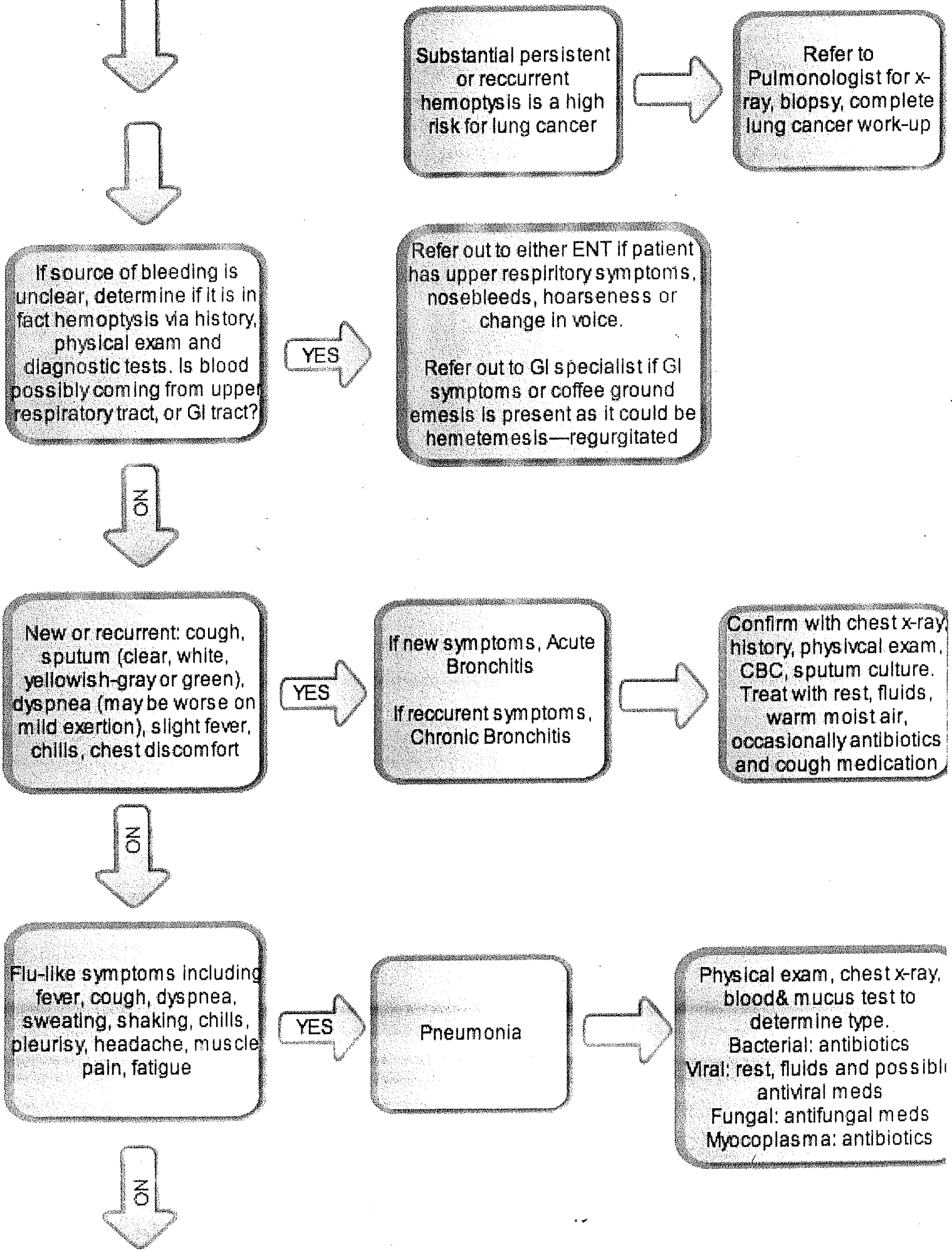


# Hemoptysis

lete



ds





Unexplained weight loss, fatigue, fever, night sweats, chills, loss of appetite, cough, lasting 3 or more weeks, chest pain or pain with breathing and coughing

YES

Tuberculosis

→

Mantoux test.  
If positive—determine if active T via chest x-ray or ct scan, clutur tests, NAA  
Latent TB—prescribe Isoniazid  
Active=Rifampin, Isoniazid, myambutol, pyrazinamide.  
May be hospitalized for two week if contagious

NO

History of infection. Chronic, deep hacking and burbling cough, productive copious amounts of foul smelling pus-filled sputum. Frequent attacks of pneumonia, may have clubbing of the fingers

YES

Bronchiectasis

→

Physical exam with localized rales and coarse ronchi. Chest x-rays, CT scans to confirm. Blood gases are usually normal.

NO

Dyspnea, angina, cough with bloody or blood-streaked sputum. At risk fo developing a blood clot in lower part of the body or legs.

YES

Pulmonary Embolism

YES

Chest x-ray, lung scan (V/Q scan), spiral computerized tomography scan, pulmonary anglogram, D-dimer blood test, ultrasound, MRI  
Treated with anticoagulants, clot dissolvers, or surgery

NO

Dyspnea, fatigue, non-productive cough, angina pectoris, fainting or syncope peripheral edema, dyspnea especially while lying flat.

YES

Pulmonary Venous Hypertension

→

Rule out secondary causes of PVH such as congenital heart disease, or collagen vascular disease. Refer to PH specialist. Family history physical exam, ECG, chest radiograph complete blood workup, autoimmune panel, immunodeficiency testing, arterial blood gas analysis, pulmonar function tests.  
Treatment is complex and may require surgery.

NO

Fatigue with increased activity, dyspnea with exertion and when lying down, swollen feet or ankles, heart palpitations and rapid fluttering, respiratory infections (bronchitis), heavy coughing, blood tinged sputum, rarely chest discomfort or pain

YES

Mitral Valve Stenosis

Medical history, physical exam, echocardiogram, electrocardiogram, holter monitoring, chest x-ray, transesophageal echocardiogram, cardiac catheterization. Treatment with diuretics, blood thinners, antibiotics, repair with balloon valvuloplasty, and sometimes surgery.

NO

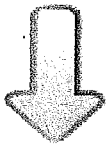
Negative results on workups, physical exams, diagnostic testing of pulmonary and cardiac systems.

YES

Idiopathic Hemoptysis

Closely monitor. Usually resolves within 6 months. Be aware of increase in lung cancer in smokers older than 40 with idiopathic hemoptysis

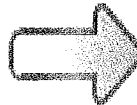
# Vertigo



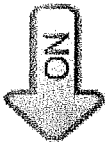
Feeling of uneasiness to a cold sweat, dizziness and then vomiting when traveling by ship, train, plane or automobile?



Motion Sickness



Sit in the front and near a window and focus on the horizon. Avoid smoke, alcohol, spicy foods. Take OTC anti-histamine such as Dramamine.



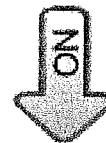
Vertigo that begins without warning, started 1 to 2 weeks following the flu or cold, and may be severe enough to cause vomiting



Viral Labyrinthitis



Physical exam, history. Looks for signs of viral infections that can trigger labyrinthitis. Antiemetics, antihistamines, and sedatives are administered as necessary.



Dizziness, lightheadedness, unsteadiness, loss of balance, blurred vision, nausea and vomiting lasting less than a minute and brought on by change in the position of your head.



Benign Positional Vertigo



Physical exam, Electronystagmography (ENG or videonystagmography (VNG)  
Treatment is Epley Maneuver or Canalith Repositioning Procedure and rarely surgery.



Episodes of recurring vertigo with hearing loss, tinnitus, aural fullness, nausea and vomiting

YES

Meniere's Disease

→

Physical exam, hearing assessment, balance assessment.  
To rule out other conditions MRI, CT, auditory brainstem response audiometry.  
Must meet following criteria  
Two spontaneous episodes of vertigo, each lasting 20 minutes or longer  
Hearing loss verified by a hearing test on at least one occasion  
Tinnitus or aural fullness  
Exclusion of other known causes of these sensory problems

NO

↓

↓

Hearing loss, tinnitus, unsteadiness, loss of balance, facial numbness and weakness

YES

Acoustic Neuroma

→

Audiometry, BAER, ENG, MRI and CT scans.  
If small and causing few or no symptoms, monitor the size and rate of growth. If more troublesome then treat with Stereotactic radiosurgery. For severecases, surgical removal necessary

NO

Sudden weakness, numbness or paralysis in your face, arm or leg, typically on one side of your body. Slurred Dizziness, loss of balance or coordination or garbled speech or difficulty understanding others. Sudden blindness in one or both eyes or double vision.

YES

Transient Ischemic Attack (TIA)

→

Physical assessment and tests for conditions that place one at high risk such as high blood pressure, cholesterol, etc. Carotid ultrasonography, CT, CTA, MRI, MRA, TEE, Arteriography.  
Treatment with Anti-platelet drugs, anticoagulants, and sometimes surgery and angioplasty (stenting)

NO

Numbness or weakness in one or more limbs, which typically occurs on one side of your body at a time or the bottom half of your body.

Partial or complete loss of vision, usually in one eye at a time, often with pain during eye movement (optic neuritis)

Double vision or blurring of vision

Tingling or pain in parts of your body

Electric-shock sensations that occur with certain head movements

Tremor, lack of coordination or unsteady gait

Fatigue

YES

Multiple Sclerosis

History and physical exam. Blood tests, lumbar puncture, MR and Evoked potential test.

Treatment with drugs such as

Corticosteroids, Interferons, Glatirame Natalizumab, Mitoxantrone.

Physical and occupational therapy.

Plasmapheresis for people who aren't responding to intravenous steroids,

Spells of vertigo, occasionally with tinnitus but without hearing loss. May have migraine headaches or non-specific headaches, but not necessarily

Sometimes vertigo will be the only symptom.

YES

Benign recurrent vertigo of adults | Migrainous Vertigo

Complete history, especially headache history. Physic

exam is usually normal and there are

no diagnostic tests other than to rule out

other conditions such as MRI or ENG.

Treatment is medications such as

First-line prophylactic medications include

calcium channel blockers, tricyclic antidepressants, and

beta-blockers.

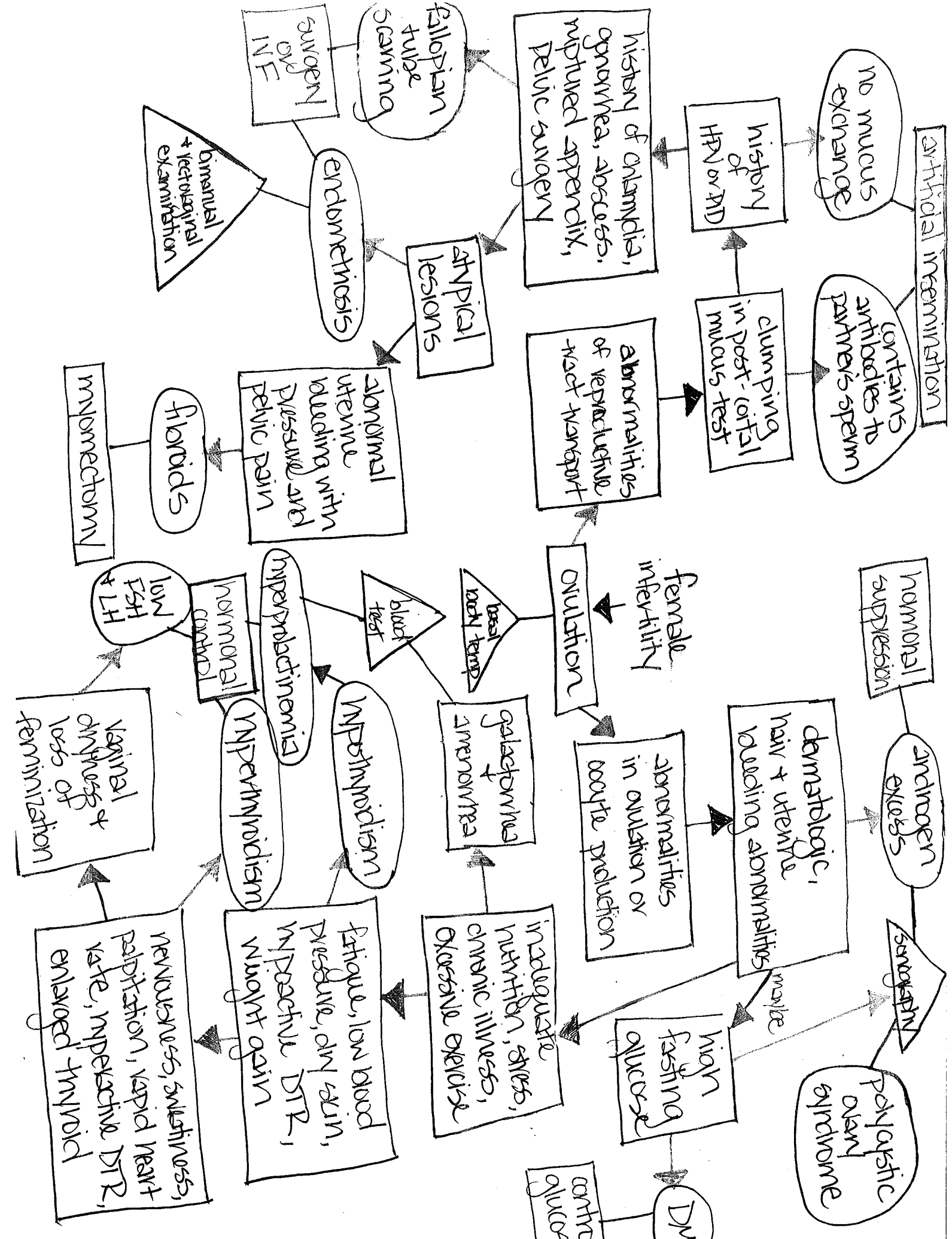
Second-line treatment includes topiramate,

valproic acid, venlafaxine, and methysergide.

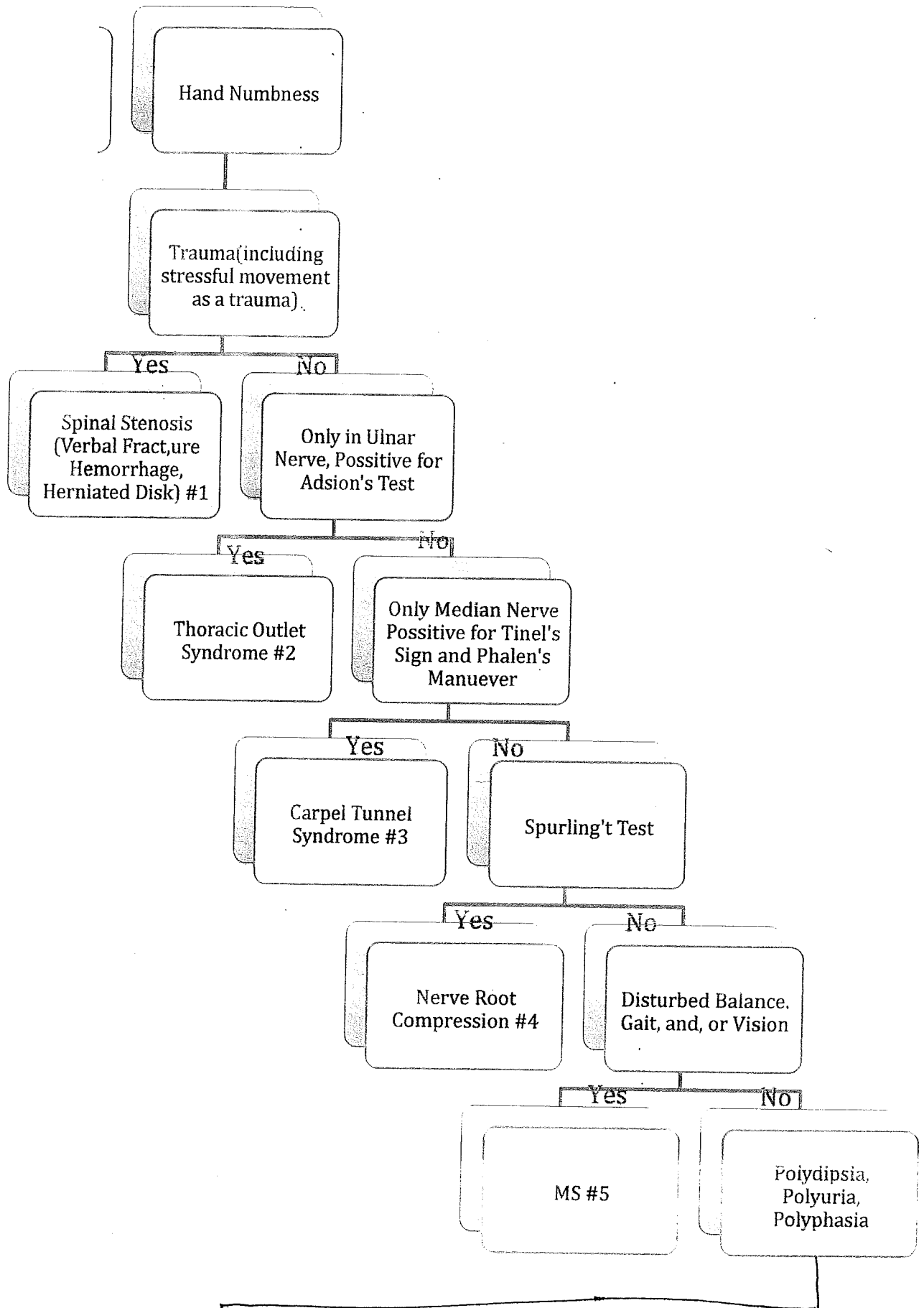
Acetazolamide.

Dietary changes may help.

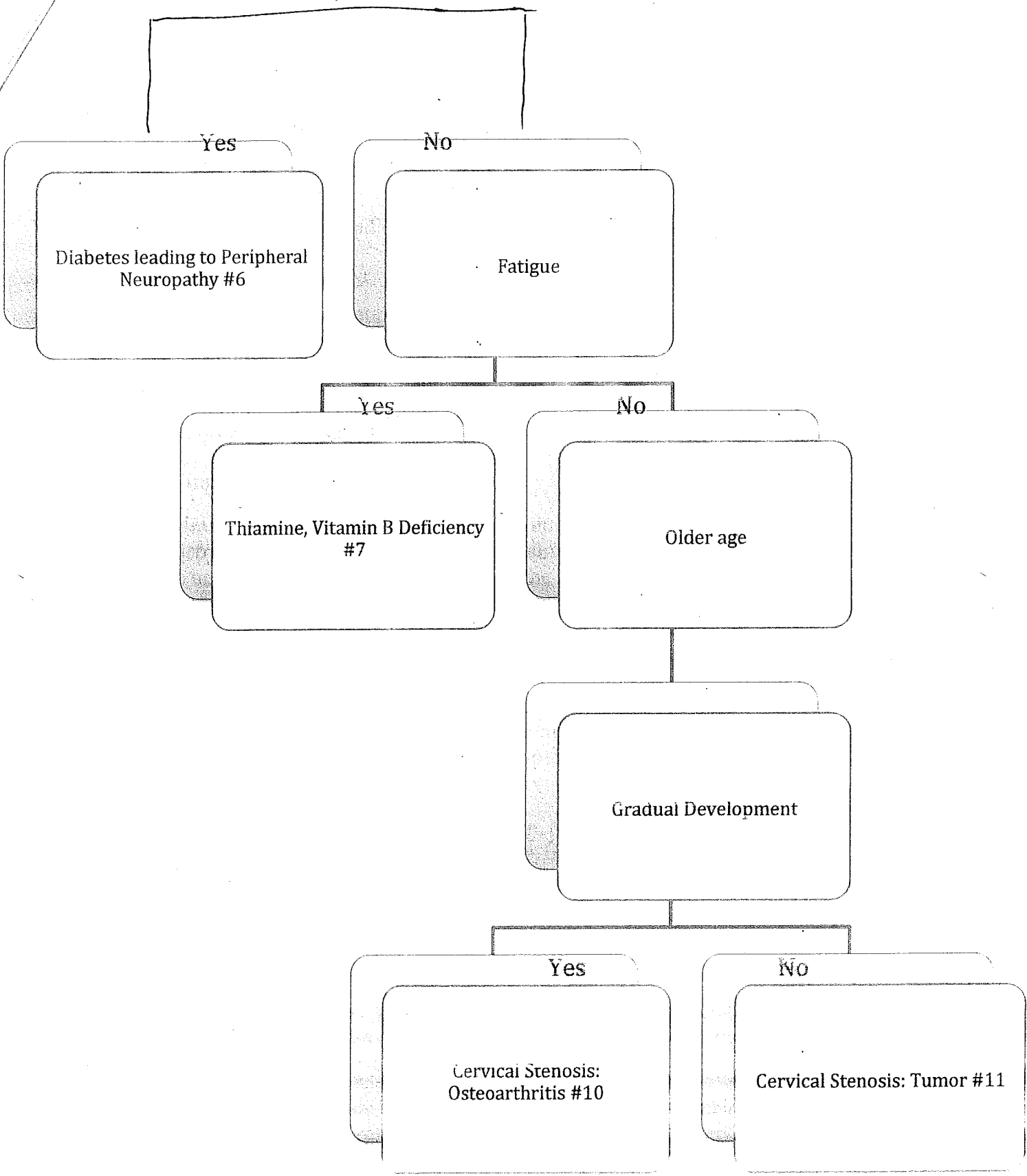












#1 •Spinal Stenosis, Radiculopathy (Verbal Fracture , Herniated Disk)

Vertebral Fracture

Symptoms - May or may not present neck pain, Osteoporosis fractures often don't. Neck stiffness. May have palpable deformity.

Tx - Conservative Care - Pain Management Drugs, Brace, Physical Therapy, Diet Supplements to promote bone health. Nonconservative Care - Surgery - Balloon Kyphoplasty, Vertebroplasty

Herniated Disk

Symptoms- Radicular pain(following dermatome) can be dull and aching or sharp and electric. There may or may not be neck pain. Herniated disk can result from trauma or may develop without trauma. If the Herniation is between C5-C6 the Biceps, lateral forearm, back of hand, thumb and first 2 fingers may have pain, and paresthesia. When the Herniation is between C6, C7 the middlefinger and Tricep may present symptoms. With Herniated disk coughing and sneezing may exasperate the symptoms. Limbs may become weak, reflexes may deviate. The patient may like to sleep in reclining chairs rather than in bed and may rest the hand on his/her's head to relieve pain. Also the ROM of the neck may be limited. Symptoms may exasperate with certain movements. The Symptoms may be relieved by traction, and worsened with the spurlings test.

Tx - Conservative care - Intermittent Traction, NSAIDS, Narcotic's, Antidepressants, Anticonvulsants, Sedatives, Ice, Heat, Massage, Ultrasound Therapy, Physical Therapy. Nonconservative Care - Surgery - Discectomy, Microdiscectomy.

#2 •Thoracic Outlet Syndrome

Symptoms - Neck, shoulder, arm pain; numbness, impaired circulation to extremity, possibly weakness in extremity. The symptoms may be mild and intermittent or severe and constant.

Tx - Conservative - (Usually Successful) Physical Therapist prescribing exercises and stretches to open and relax the thoracic outlets. Nonconservative - Surgery - possibly removal of rib.

#3 •Carpal Tunnel Syndrome

Symptoms - Numbness, tingling of Median Nerve - Palmar side of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and radial half of 4<sup>th</sup> fingers. They symptoms exasperate at night, and may wake patient. The syndrome may be temporary and resolve or persist and progress. It may develop a burning sensation, cramping, and/or weakness. It may cause decreased wrist strength and even atrophy.

Tx - Conservative - NSAIDs, wrist brace. Nonconservative - Cortisone injections, surgery(Carpal Tunnel Release, Endoscope Carpal Tunnel Release)

#### #4 •Nerve Root Compression

Causes - Bone changes due to RA, Osteoarthritis, Diabetes(ischemia of nerve root), Infectious disorders(Lymes, Herpes Zoster, Meningitis), Tumor, Mass Spinal Lesions, Vertebral Fracture, Herniated Disk.

Rheumatoid Arthritis effecting the Cervical Spine

Symptoms - Pain, stiffness, decreased ROM, inflammation.

Tx - Drugs - NSAIDs(there are a wide spectrum of drugs used for RA), Physical Therapy, education, rest, Diet Therapy, etc.

Paget's Disease of the Cervical Vertebrae

Symptoms - May or may not have neck pain. There may be radiating pain, numbness, tingling, parasthesia due to the bone overgrowth pinching the nerve root. The radiating symptoms depends upon which nerve root was compressed.

Herniated Disk - See #1

Vertebral Fracture - See #1

Tumor - See #11

#### #5 •MS

Symptoms - Tingling, Numbness, Weakness of limbs, Loss of Balance, Blurred and/or Double Vision, Tremors

Tx - Drugs, Therapy - Physical, Occupational, Cognitive

#6 •Diabetes Leading to Peripheral Neuropathy(from ischemia, chronic hyperglycemia, etc)

Symptoms - Tingling, Numbness, Loss of Feeling, Muscle Atrophy, Pain, Cramping, Sensitive to Touch, Poor Coordination, etc.

Tx - Normalize the blood sugar levels, meal planning, physical exercise. Medication.  
- There are medications for Diabetics including Insulin of course. For th Peripheral Neuropathy - Antidepressants, Anticonvulsants, Opioids etc.

#7 •Thiamine, Vit. B Deficiency

Symptoms - Tingling, Numbness, Muscle Weakness, Loss of Reflexes, Poor Balance, Loss of Appetite, Nausea, Fatigue, Depression, Memory Loss, Difficult Concentrating, Rapid HR, etc.

Tx - Vitamin B suppliments, Fat soluble Vitamin B suppliments, treat the underlying cause of the deficiency (there are many other causes of vit. B deficiency for example, poor diet, excess stress, Celiac's Disease, Gastric Bypass, vegan diet, Crohn's Disease, drug abuse, some medications, toxins, etc.)

#### Pernicious Anemia

Symptoms - Includes symptoms of both Vit B deficiency and Anemia. Symptoms of Vit B deficiency is covered in #7. Anemia - Fatigue, SOB, Dizziness, Head Ache, Cold Extremities, Pale Skin, Gums, Nails, Chest pain, Arrhythmia.

Tx - High doses of Vit B. This condition is often due to the body not being able to absorb the Vitamin B due to a deficiency in Intrinsic Factor. The Intrinsic Factor is produced by the Stomach mucosa. This may be the underlying cause and needs to be treated also.

#### Crohn's Disease

Symptoms - Vit. B Deficiency Symptoms, plus Abdominal Pain and Cramping, Diarrhea, Blood in Stools, Ulcers, Reduced Appetite, Weightloss

Tx - Large doses of Vit B. Fat soluble Vit. B. Treatment of Crohn's Disease - Drugs - Mainly Anti inflammatory and Immuno-modulators.

#10 •Spinal Stenosis - Osteoarthritis

Symptoms of Stenosis - Numbness, Tingling, Pain, Cramping, Weakness of arms or legs, Abnormal Reflexes, Muscle Spasms, in severe conditions - Incontinence, difficulties Urinating or with BMs, Poor Coordination, Troubles Walking, ect.

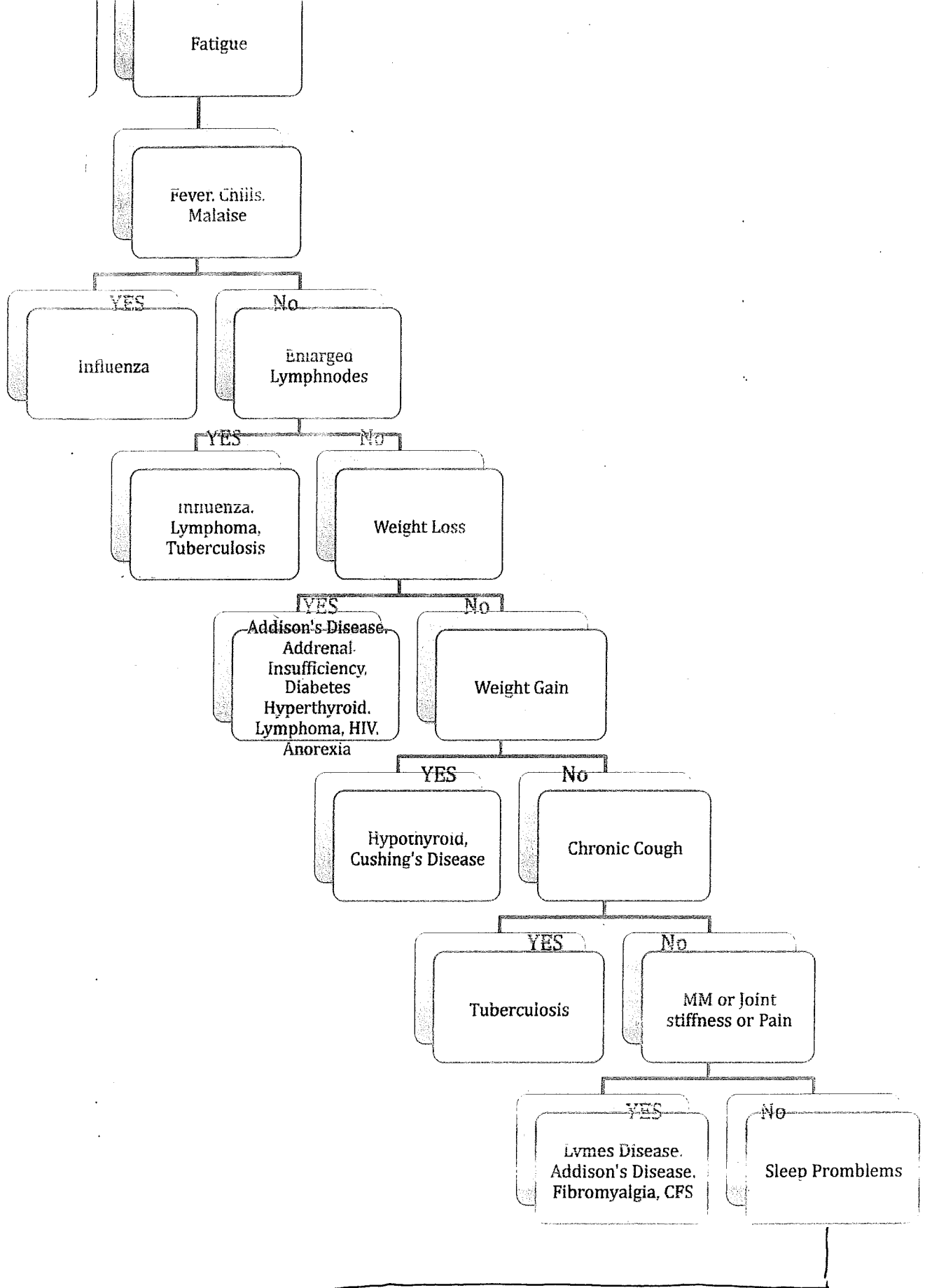
Symptoms of Cervical Osteoarthritis - Neck Stiffness and Pain, Head Ache, Shoulder, arm, chest pain, Grinding Sensation when moving Nek.

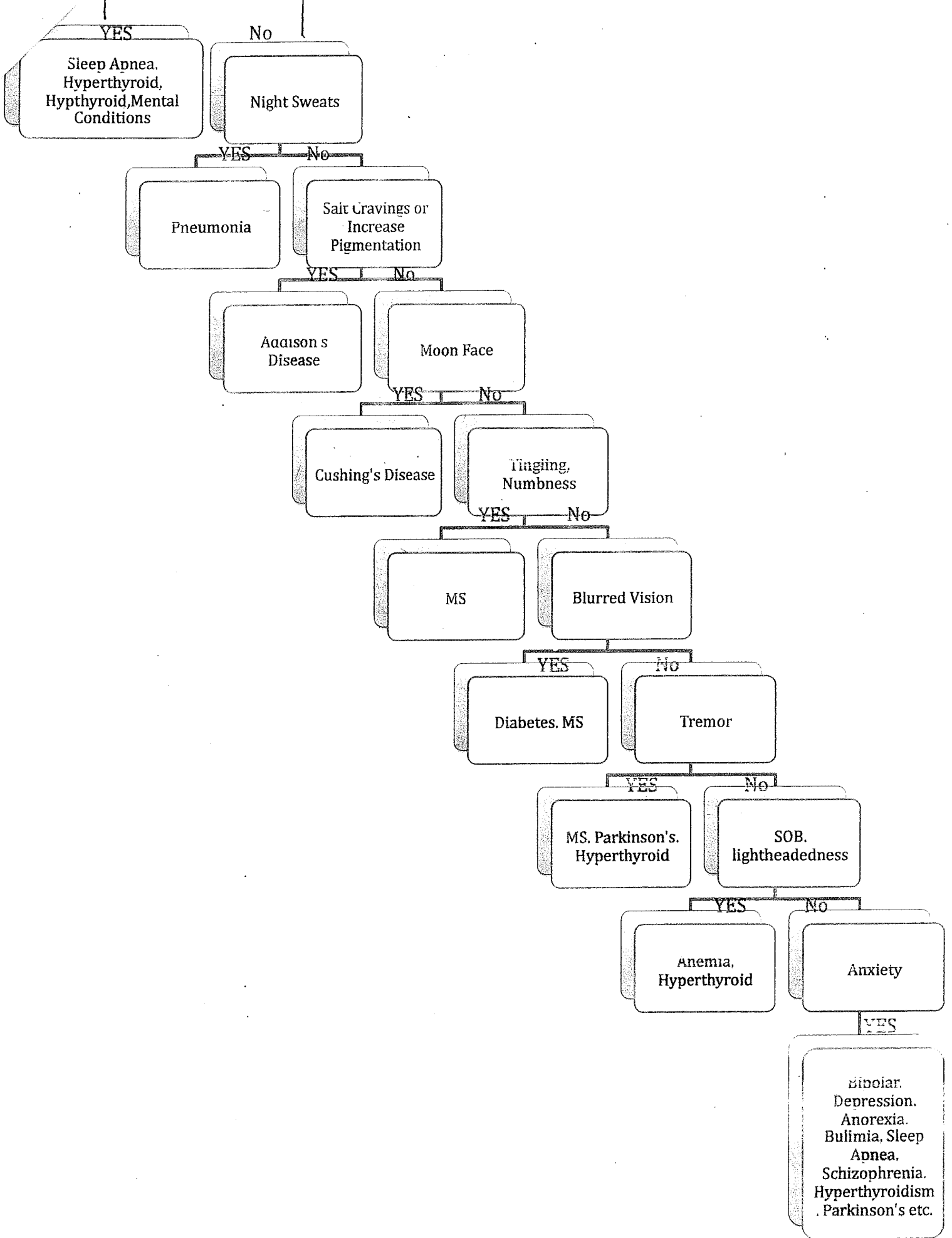
Tx - NSAID, Orthopedic braces, Exercise, Diet, Supplements (Calcium, Antioxidants, Glucosamine, Chondroitin) Physical, Occupational Therapy, Heat, Surgery - Decompressive Laminectomy.

#11 • Spinal Stenosis - Tumor (Benign or Malignant) - Malignant - Oligodendroglioma, Meningioma, Ependymoma or tumors outside of the Dura Matter. Benign - Neurofibroma, Meningioma

Symptoms - Neck Pain exacerbated by cough or straining, Numbness or Tingling, possibly Incontinent, Paralysis.

Tx - Surgical Resection of Tumor, Radiation Therapy, Corticosteroids.





Influenza – Chills, Fever, Malaise, Sudden onset, Cough, Rhinorrhea, HA

Tx – Anti Viral Drugs, Bed Rest, Lots of Water, Plenty of Sleep.

Lymphoma – Painless Enlarged Lymphnodes, Weightloss, Fever, Excessive Night Sweats, Body Itchiness. Anorexia

Tx – Chemotherapy, Radiation, Surgerv

Tuberculosis – Chronic Cough with possibly Blood Tinged Sputum, Fever, Night Sweats, Weight Loss

Tx – Drugs

Addison's Disease – Weight Loss, Increased Pigmentation of Skin, Faintness, Low BP, Nausia, Vomiting, Salt Cravings, Muscle and Joint Pain

Tx – Hormone Replacement, Increase Salt Intake, Regular Check Ups

Addrenal Insufficiency – Chronic Fatigue Progressively Getting Worse, Muscle Weakness. Loss of Appetite, Weight Loss, Nausea, Vomiting, Diarrhea

Tx – Hormone Replacement

Diabetes Type 2 – Polyphasia, Polydipsia, Polyuria, Overweight, Frequent Infection, Blurred Vision, Tingling Numbness in Hands and Feet

Tx – Diabetes Medication, Exerxise, Weightloss, Diet, Insulin

Hyperthyroidism – Palpitations, Heat Intolerance, Nervousness, Insomnia, Breathlessness, Increased Bowel Movements, Late Menstrual Period, Fast Heart Rate, Trembling Hands

Tx – AntiThyroid Hormone, Radioactive Iodine, Surgical Removal

HIV – Rapid Weight loss, Recurring Fever, Profuse Night Sweats, Dry Cough, Diarrhea that lasts longer then a week

Tx – Drugs

Anorexia Nervosa – Extremely Low Weight, Dieting, Depression, Brittle Hair, Bradicardia, Amennoea.

Tx – MD for physical damage, Psychotherapy, Counseling – Bognitive, Behavior, Family, Group

Hypothyroidism – Weight Gain, Difficult Loosing Weight, Dry Skin and Gair, Cold Intolerance, Hair Loss, Constipation, Depression, Memory Loss

Tx – Hormone Replacement Therapy – Synthetic T4



**Lashing's Disease** – Weight Gain (mostly around midsection, upper back), Moon Face, Buffalo hump (between shoulders), Pink and/or Purple Stretch Marks on the Abdomen, Thigh, Breasts or Arms. Bruise Easily, Slow Healing from Traumas, Acne

Tx – Surgery (adenoectomy) Radiation, Possibly Adrenalectomy

**Lyme's Disease** – 3 Phases, It is the 3<sup>rd</sup> Phase that has the Profound Fatigue. Polyneuropathy, Poor Short Term Memory, Poor Concentration, Weakness in Legs

Tx – Antibiotics

**Fibromyalgia** – Wide Spread Joint and MM Pain, Tender Points, Sensitive to the Touch, Sleep Disturbance

Tx – Drugs for Sleep and Pain.

**Chronic Fatigue Syndrome** – New Onset, Can Last Anywhere from a Week to Years, Forgetfulness, Difficult Concentration, Confusion, Joint Pain, Lymph Node Tenderness, Mild Fever, Sore Throat, Depression,

Tx – Drugs – AntiViral, AntiYeast, Pain Meds, Anxiety Meds, Depression Meds.

**Sleep Apnea** – Loud Snoring, Grunts, Choking, Gasping sounds during sleep, Daytime Sleepiness, Slow Reflexes, Poor Concentration, Depression

Tx – Sleep position, Breathing Solutions, Singing Therapy, Lifestyle Changes, Dental Device, Surgery

**MS** – Tingling Numbness, Weakness in Limbs, Loss of Balance, Blurred and/or Double Vision, Tremors

Tx – Drugs, Therapy – Physical, Occupational, Cognitive, Vocal

**Parkinson's Disease** – Resting Tremor, Bradykinesia Rigidity, Postural Instability

Tx – Drugs, Speech Therapy, Physical Therapist, Occupational Therapist

**Manic Depressive** – Elevated, Expansive, Irritable Mood; Racing Thoughts; Rapid Excessive Speech; Decreased Need for Sleep, Grandiose Beliefs, Tangential Speech, Poor Judgement

Tx – Psychotropic drugs

**Depression** – Feelings of Helplessness, Loss of Interest in Daily Activities, Appetite or Weight Changes, Sleep Changes, Irritability, Restlessness, Loss of Energy, Self Loathing.

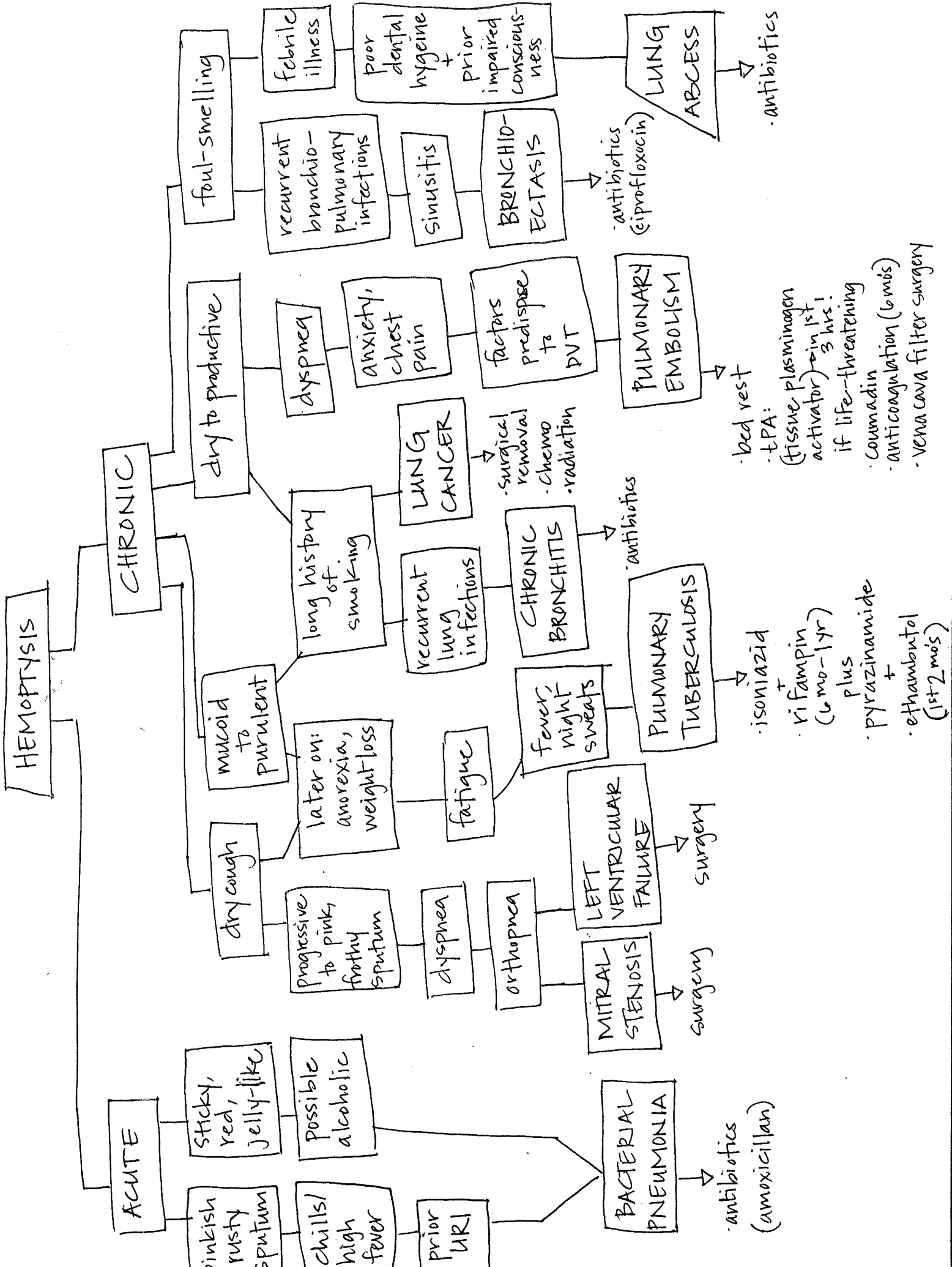
Tx – Psychotherapy, Antidepressants

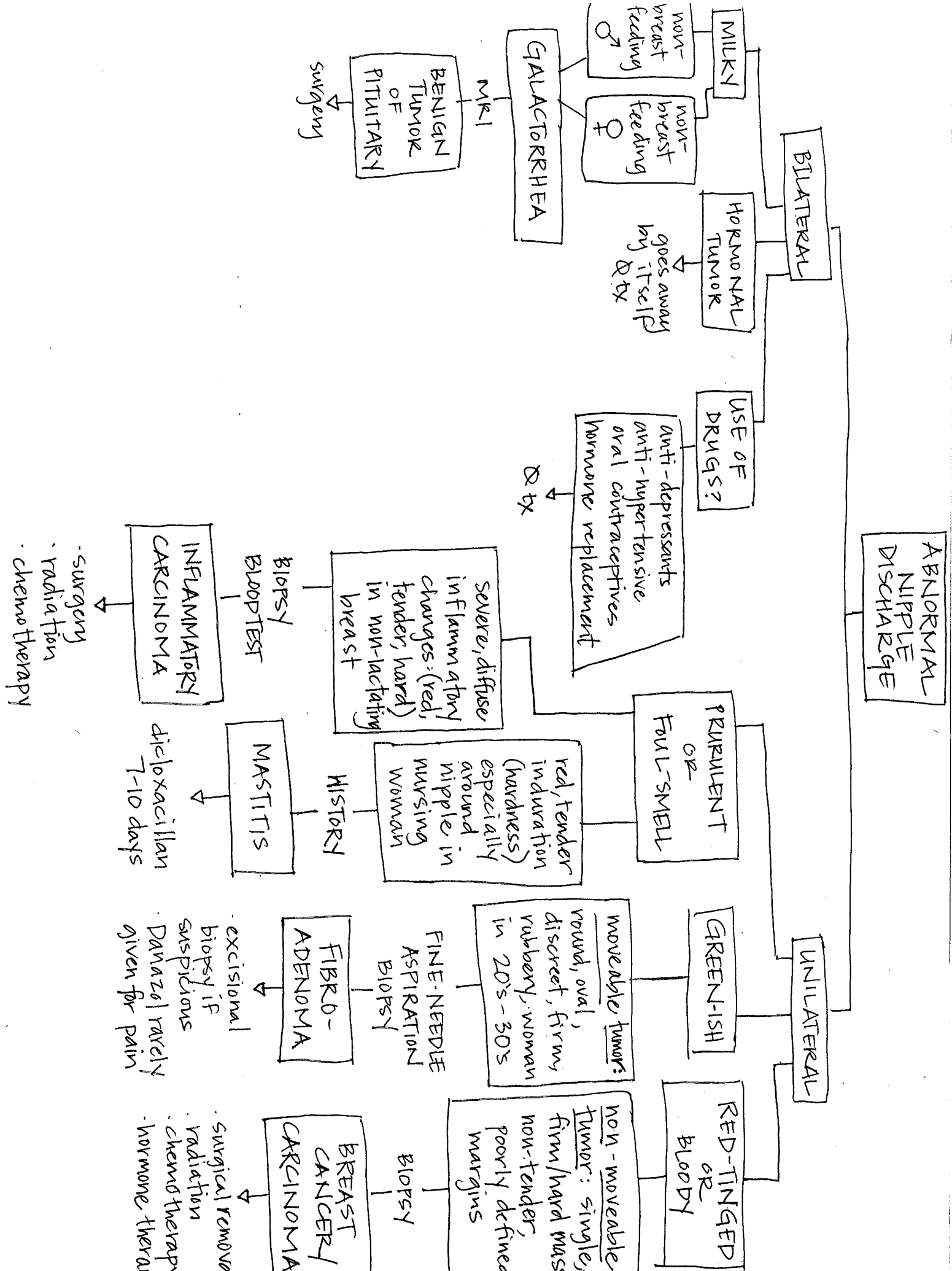
**Bulimia Nervosa** – Abdominal Pain, Chronic Sore Throat, Amenorrhea, Weight Gain, Swelling of Hands and Feet, Depression

Tx – Physician Assessment to Treat Physical Damage, Psychotherapy, Counseling

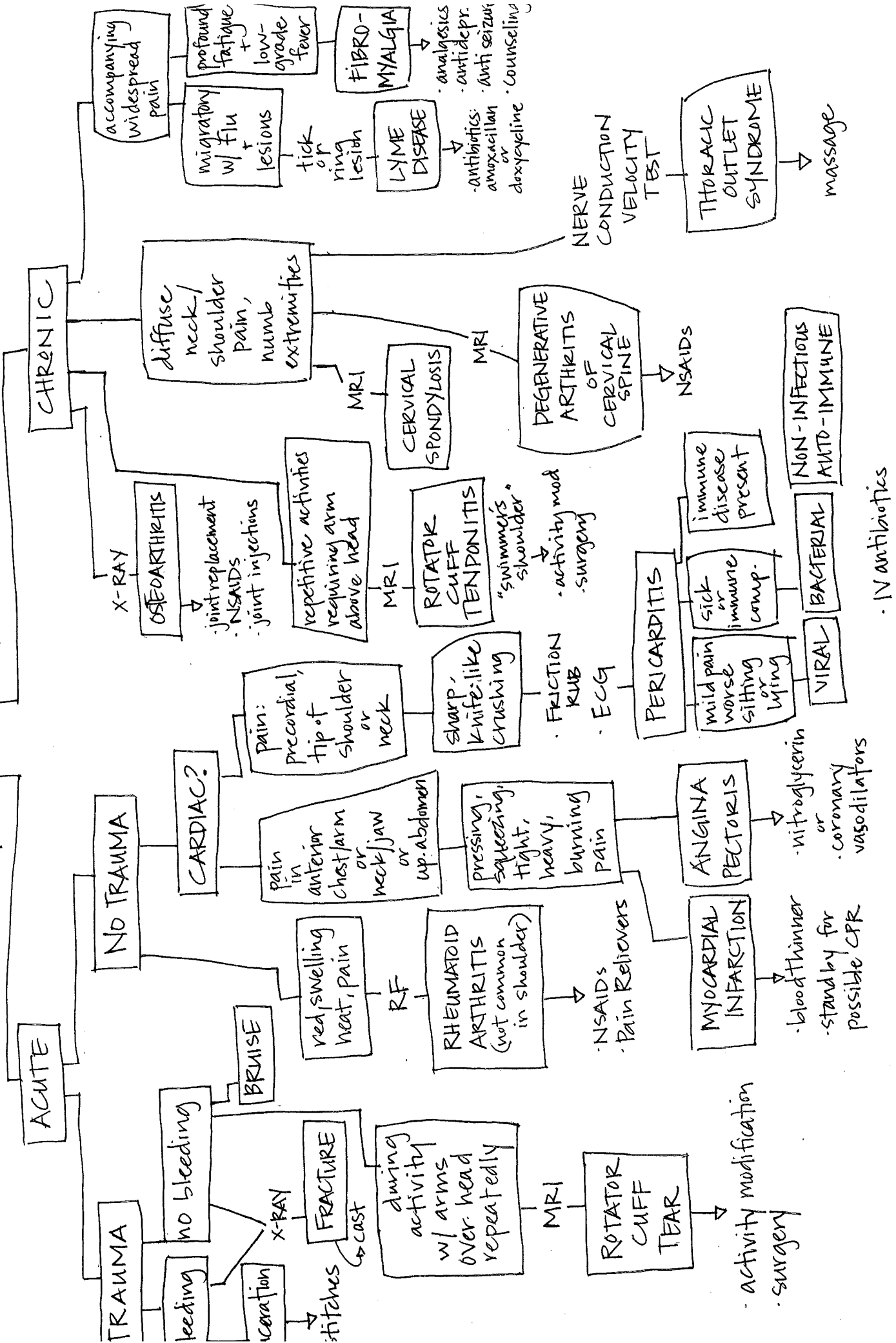
**Schizophrenia** – Bland Vacant Facial Expression, Overly Acute Senses, Out of Norm Emotions, Behavior, and Cognitive Symptoms, Delusions, Hallucinations

Tx – Medication, Psychotherapy, Group Therapy





# UPPER ARM PAIN



• IV antibiotics

**Algorithm #1: Blood in Stool**

What color is the stool?

Black? Maroon? Bright red?

(Upper GI Bleeding)

(Lower GI bleeding)

(Anal/rectal bleeding)

Have you eaten black licorice, blueberries, Pepto Bismal, or iron supplements in the last 24 hours?

Yes →  
No →

DIAGNOSIS:  
Discoloration of stool could be due to ingesting these items.

Are you taking any anti-inflammatory medications?

Yes →  
No →

DIAGNOSIS: Medication could be causing some upper GI bleeding.

Are you also vomiting blood?

Yes →  
No →

Do you have a history of alcoholism?

Yes →  
No →

DIAGNOSIS: Ruptured esophageal varices caused by liver cirrhosis.

Do you also have fatigue and a poor appetite?

Yes →  
No →

DIAGNOSIS: Gastritis

Did you have an episode of violent vomiting (without blood) in the last 24 hours?

Yes →  
No →

DIAGNOSIS: Peptic ulcer/Duodenal ulcer

DIAGNOSIS: Esophageal tear

Have you eaten beets or tomatoes in the last 24 hours?

Yes →  
No →

DIAGNOSIS:  
Discoloration of stool could be due to ingesting these items.

Do you also have abdominal pain?

Yes →  
No →

Is the pain accompanied by fatigue and a poor appetite?

Yes →  
No →

DIAGNOSIS: Gastritis

Is the pain accompanied by cramping and diarrhea with pus?

Yes →  
No →

DIAGNOSIS: Crohn's Disease

Is the pain characterized by flare-ups of cramping, diarrhea, and rectal bleeding?

Yes →  
No →

DIAGNOSIS: Ulcerative Colitis

DIAGNOSIS: Intestinal polyps

Do you experience abdominal pain characterized by flare-ups of cramping and diarrhea?

Yes →  
No →

DIAGNOSIS: Ulcerative Colitis

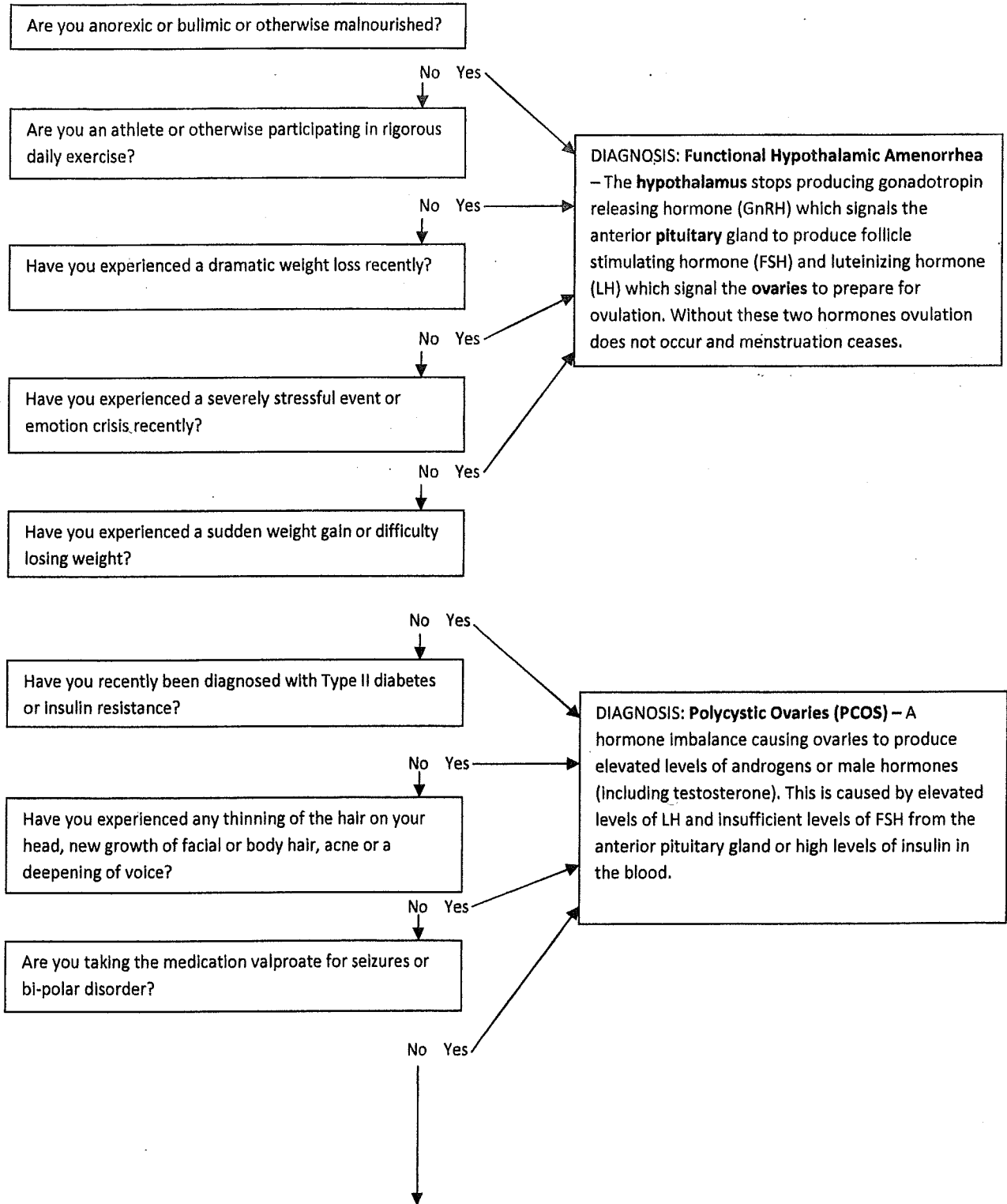
Do you experience local pain when having a bowel movement?

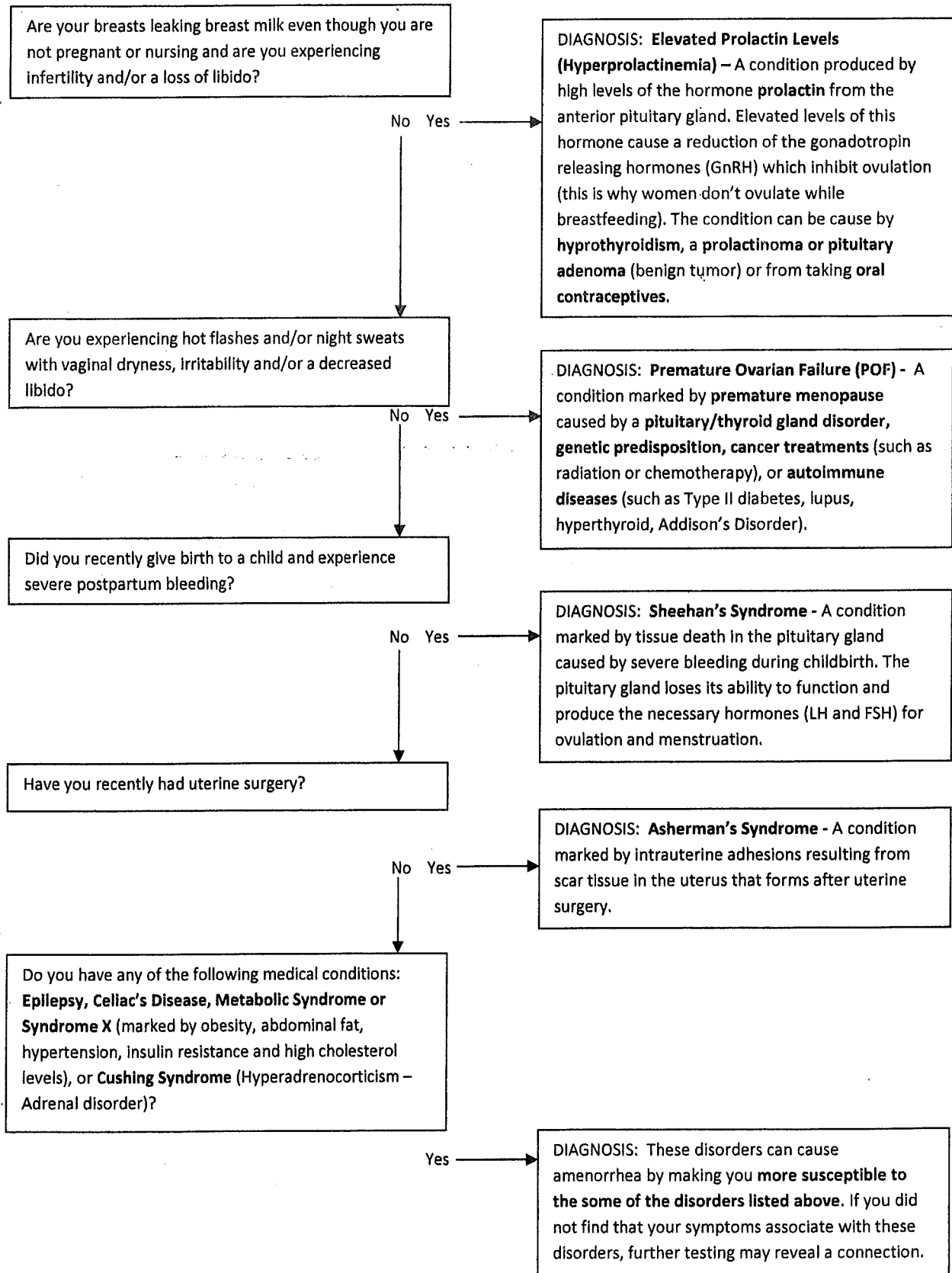
Yes →

DIAGNOSIS: Hemorrhoids or an anal fissure

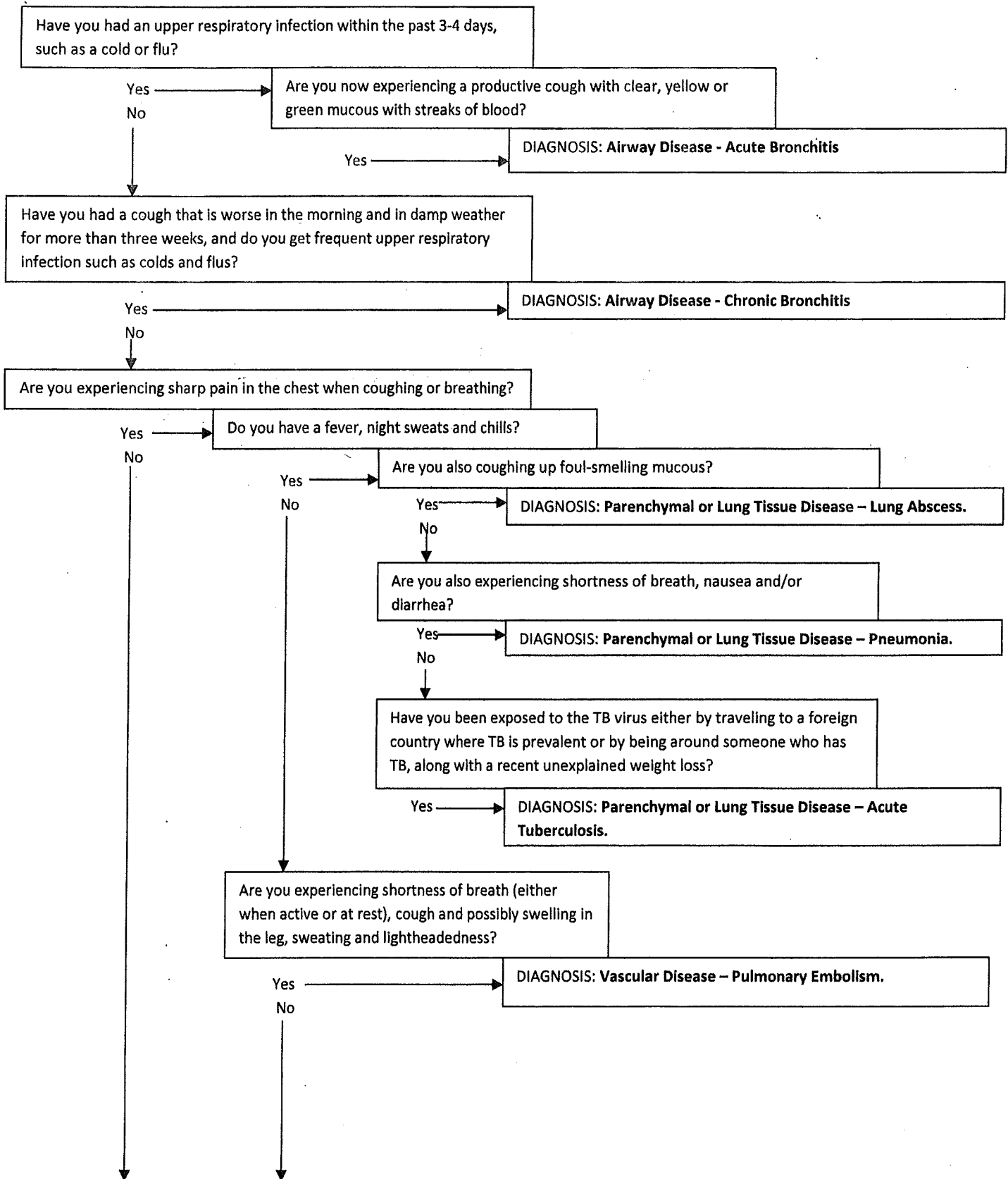
**Algorithm #2: Secondary Amenorrhea: Absent or skipped periods in adult women who have had healthy periods in the past**

*For the purpose of this algorithm: Amenorrhea with no congenital anatomic, organic or genetic causes or abnormalities.*

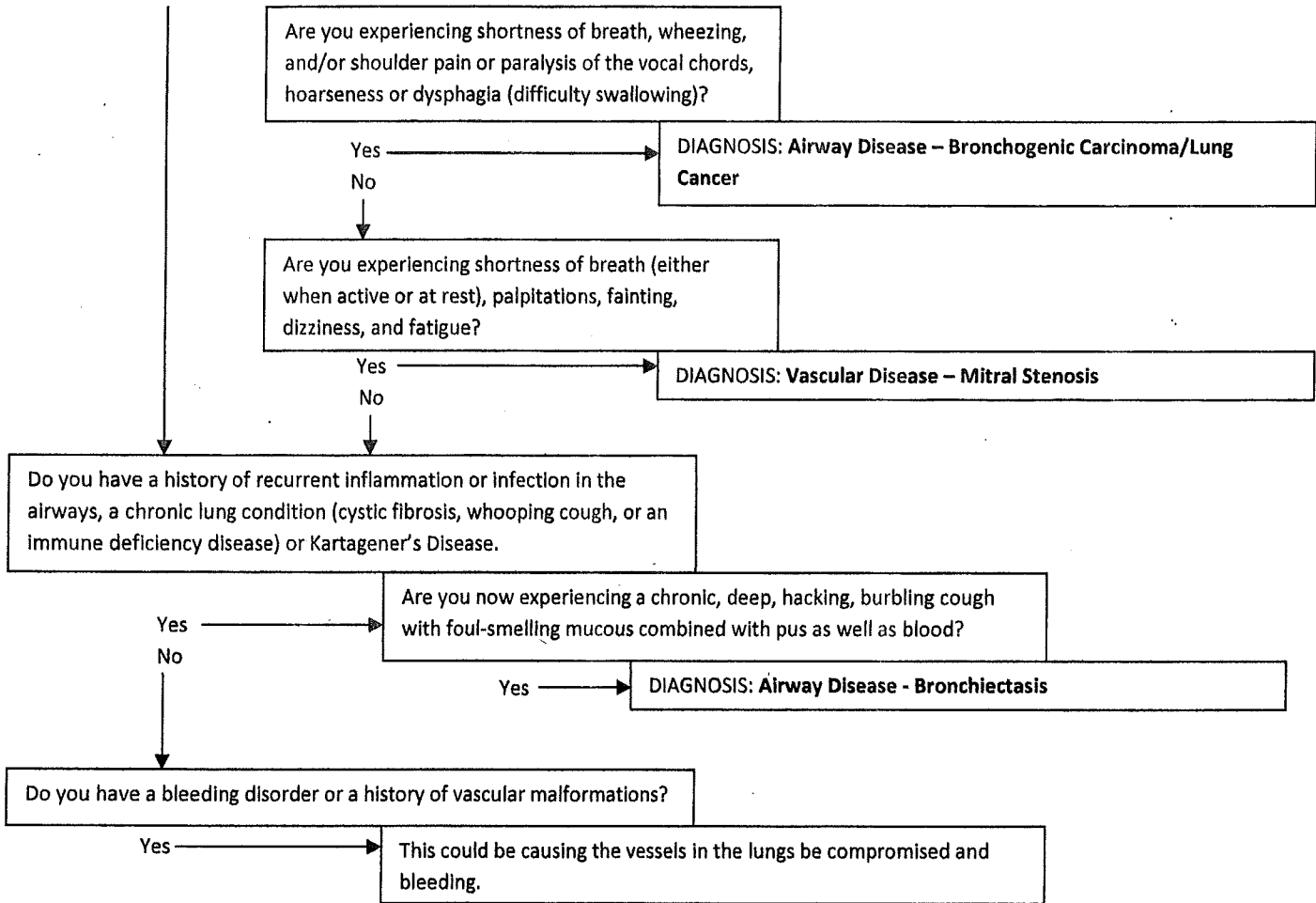


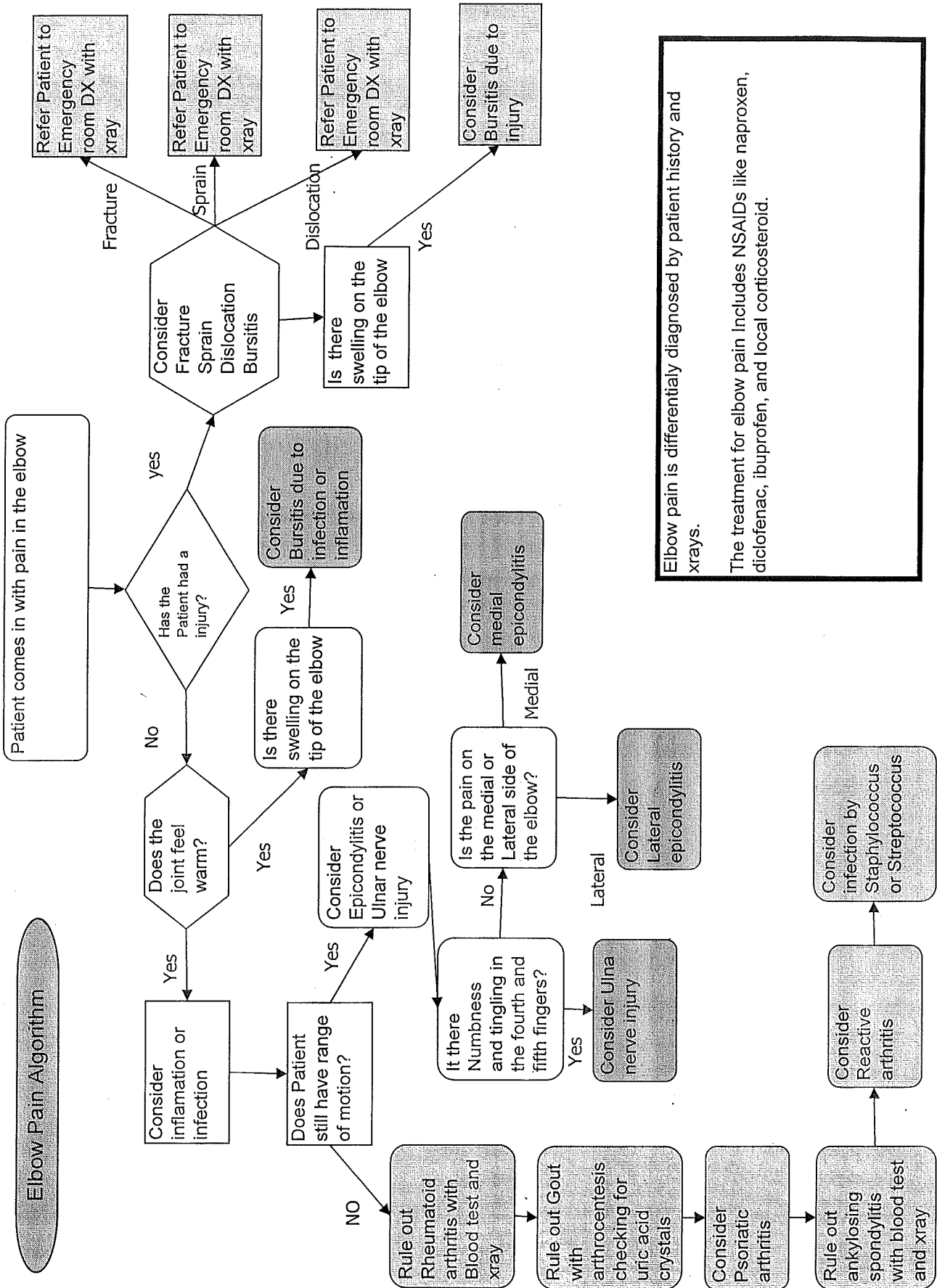


**Algorithm #3: Hemoptysis (coughing up blood)**



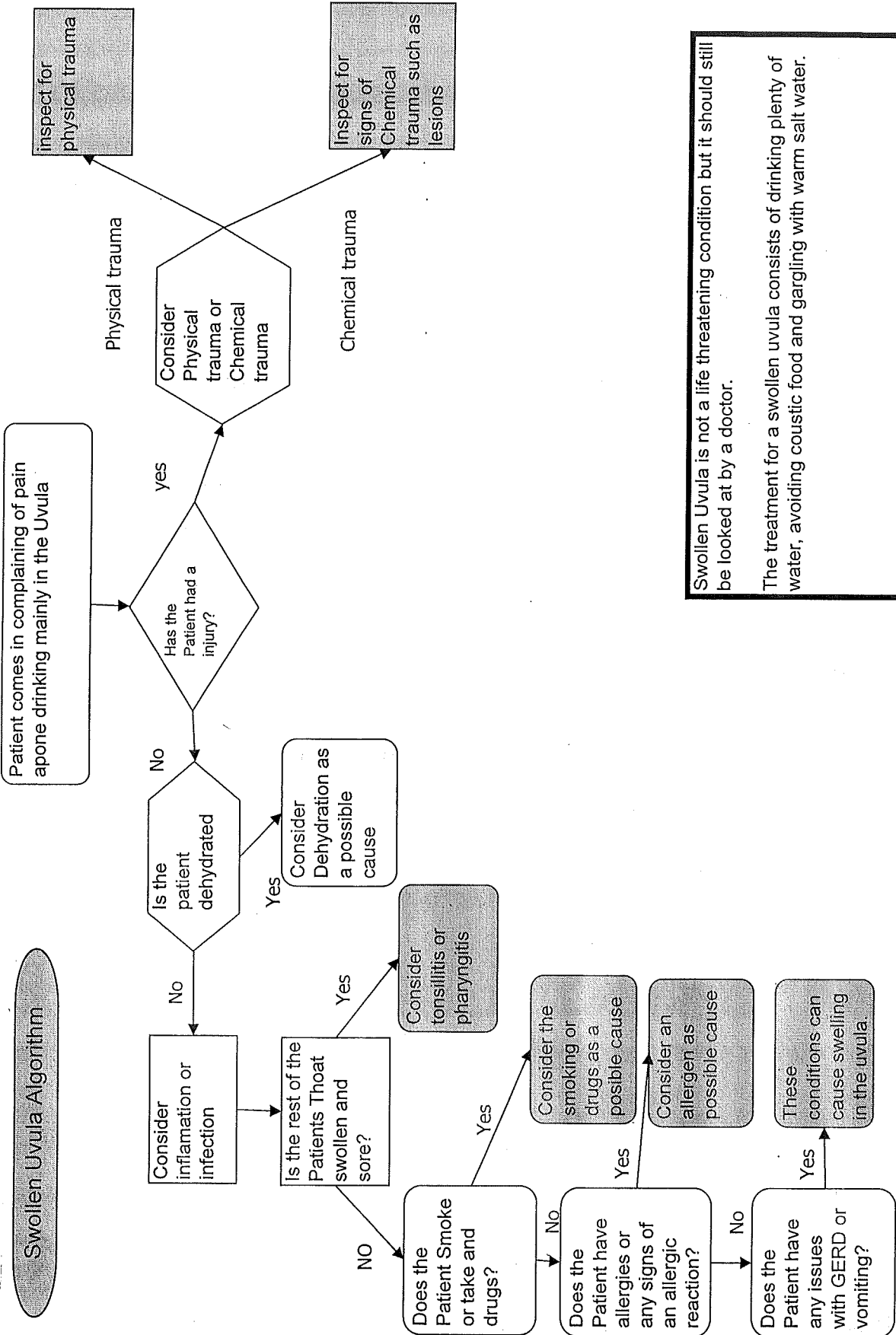






Elbow pain is differentially diagnosed by patient history and xrays.

The treatment for elbow pain includes NSAIDs like naproxen, diclofenac, ibuprofen, and local corticosteroid.



Swollen Uvula is not a life threatening condition but it should still be looked at by a doctor.

The treatment for a swollen uvula consists of drinking plenty of water, avoiding caustic food and gargling with warm salt water.