

## 499721 Medical Terminology (NU-2557)

### “Body Systems 4 (CNS, EENT)”

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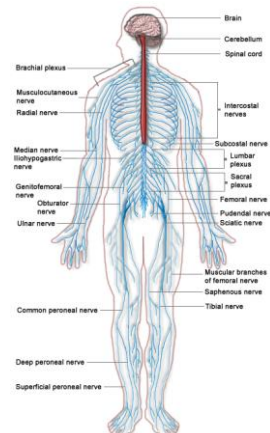
30 ตุลาคม 2557

## Topics

- Quiz : Body Systems 3 (Repro, endocrine)
- Course schedule
- Assignments: paper (13 พ.ย. 57), presentation (20 พ.ย. 57)
- Final examination: วันที่ 27 พฤศจิกายน 2557, 13.00-15.30 น.
- Class activities
- Medical terminology in the body systems 4
  - Nervous system
  - Eye, ear, nose, throat
- Homework

## Nervous System

- Area of study – specialist
- Structure and Function
- Signs and symptoms
- Lab investigation
- Diseases
- Medical & surgical procedures
- Medications



## Nervous System

### 1. Area of study – specialist

- Neurology – neurologist
- Neurosurgery – neurosurgeon
- Neurophysiology
- Neuropathology
- Neur/o [Gr.] = nerve
- *Nervus* [L.] = nerve  
(nevus = mole)



## Nervous System

### 2. Structure and Function

- **Cen**tral **ner**vous **sys**tem (CNS)
  - head (cephal/o), brain (encephal/o, cerebr/o)
  - spinal cord (myel/o)
- **Per**ipheral nervous system (PNS) (**rif**)
  - cranial nerve, spinal nerve, nerve plexus, peripheral nerve
- **Auto**nomous nervous system (ANS)
  - **sympa**thetic, **para**sympa**the**tic (sympathy = เห็นอกเห็นใจ)
- nerve cells, **neu**rons, **sen**sory, **mo**tor

## Nervous System

### 2. Structure and Function

- nerve **im**pulse, neuro**tran**smitter, **re**ceptor
- skull (crani/o), **men**inx, **men**inges (mening/o) (**jeez**)
- brain, gyrus, sulcus, **cere**brum, **cere**bellum, brain stem
- cerebro**spi**nal fluid (CSF), **ven**tricles of the brain
- nerve root (radicul/o)

## Nervous System

### 3. Signs and symptoms

- **head**ache (**hed**-eyk)
- **sei**zure (**see**-zher), **conv**ulsion
- **syn**cope (**pee**), loss of **con**sciousness, un**con**sciousness, **co**matose, **co**ma
- **num**bness, **anes**thesia, **hypo**esthesia, **hype**sthesia, **hyper**esthesia, **hyper**aesthesia, **para**esthesia (zh)
- **aki**nesia, **aki**nesis, **brady**nesia, **hyper**nesia, **dys**nesia
- **trem**or, **ny**stagmus

## Nervous System

### 3. Signs and symptoms

- ab**nor**mal gait, **ata**xia, incoordination movement
- **para**resis (-paresis), **para**lysis (-plegia) (**j**)
- **hemi**plegia, **para**plegia, **quadri**plegia, **tetra**plegia
- **a**phasia, **dys**phasia (can't speak, language), **a**phonia
- **a**lexia, **dys**lexia, word blindness (can't read)
- **a**graphia, **anor**thography (can't write)
- **am**nesia, loss of memory, forgetful = tending to forget

## Nervous System

### 4. Lab investigation

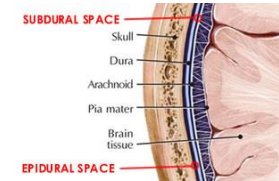
- Neurological examination
  - CN, sensory, motor, reflex, movement, mental status
- cerebrospinal fluid (CSF) analysis
- skull and facial radiography,
- Computed Tomography of the brain (CT brain)
- Magnetic Resonance Imaging (MRI)
- Electroencephalography (EEG)
- Cerebral angiography



## Nervous System

### 5. Diseases

- tension headache, migraine
- epilepsy
- cerebrovascular accident (CVA), stroke, cerebral infarction, cerebral hemorrhage, intracranial
- epidural hematoma, subdural hematoma, subarachnoid hemorrhage (rak)



## Nervous System

### 5. Diseases

- meningitis, encephalitis, polyneuritis
- neural tube defect, anencephaly, myelomeningocele
- hydrocephalus
- brain tumor, meningioma, glioblastoma, neurooma
- dementia, Alzheimer disease, Amyotrophic lateral sclerosis (ALS), Parkinson disease



## Nervous System

### 6. Medical and surgical procedures

- **l**umbar **p**uncture (LP), spinal tap
- intra**c**ranial pressure
- intra**t**hecal injection, subar**r**achnoid space
- spinal nerve block, spinal anes**t**hesia
- local anes**t**hesia, nerve block
- crani**o**tomy – crani**e**ctomy – crani**p**lasty

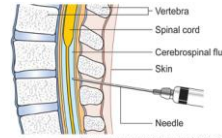
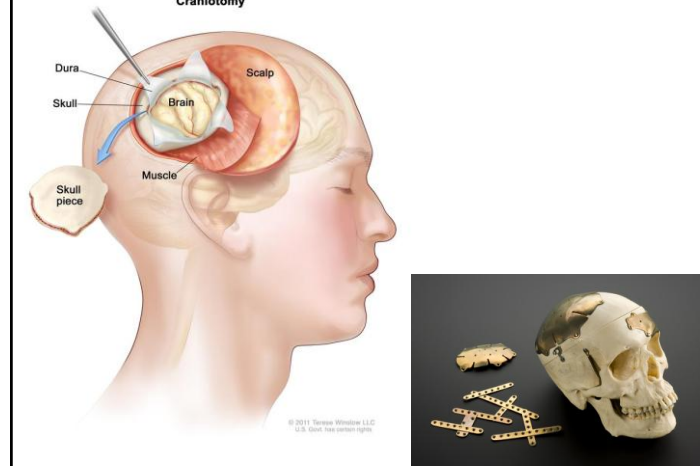


Diagram showing how you have a lumbar puncture  
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### Craniotomy

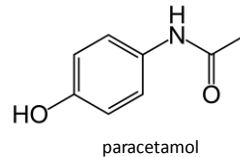


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## Nervous System

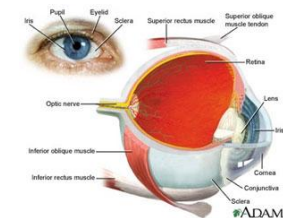
### 7. Medications

- antiepi**l**ep**t**ic, anticon**v**ulsant
- anal**g**esic, antipy**r**etic
- anti**e**metic
- **g**eneral anes**t**hetic, inhal**a**tional, intrav**e**nous
- local anes**t**hetic, infil**t**ration



## Eye-Ear-Nose-Throat (EENT)

- Area of study – specialist
- Structure and Function
- Signs and symptoms
- Lab investigation
- Diseases
- Medical & surgical procedures
- Medications



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## Eye-Ear-Nose-Throat (EENT)

### 1. Area of study – specialist

- ophthalmology – ophthalmologist (of), oculist
- optometry – optometrist
- otolaryngology – otolaryngologist, ENT physician
- otorhinolaryngology, ot/o, rhin/o, laryng/o
- otology, audiology – otologist, aurist, audiologist
- audi/o = sound, hearing

## Eye-Ear-Nose-Throat (EENT)

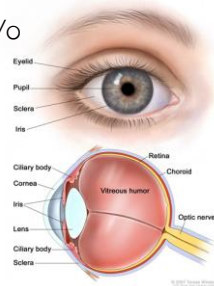
### 2. Structure and Function

- eyes = ocul/o [L.], ophthalm/o [Gr.], opt/o, optic/o
- ears = auricul/o [L.], oto [Gr.]
- nose = nas/o [L.], rhin/o [Gr.]
- throat, pharynx, pharynges (pl.) = pharyng/o [Gr.]
- larynx, larynges (pl.) = laryng/o [Gr.]
- x = [s], ryn = [rin], ges = [jeez]

## Eye-Ear-Nose-Throat (EENT)

### 2. Structure and Function

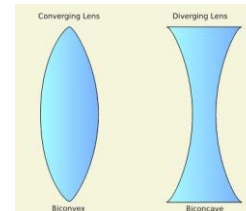
- eyeball, eye globe, vision (zh), eyesight
- eyelid palpebr/o, blephar/o
- lacrimal gland dacry/o
- tears lacrim/o
- cornea corne/o, kerat/o
- conjunctiva conjunctiv/o



## Eye-Ear-Nose-Throat (EENT)

### 2. Structure and Function

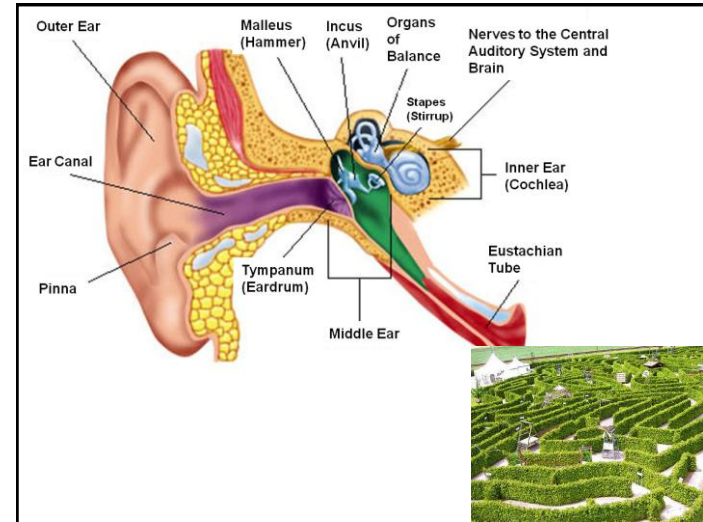
- iris = ir/o, irid/o
- pupil = pupill/o, cor/o, miosis, mydriasis
- lens of the eye = phac/o, phak/o
- biconvex, biconcave
- aqueous humor, vitreous humor
- vitre/o = glassy,
- retina = retin/o



## Eye-Ear-Nose-Throat (EENT)

### 2. Structure and Function

- Outer Ear : **pin**na, **aur**icle, **au**ditory **canal**, **ceru**men, **ear**wax
- Middle Ear (**tym**panum) : **tym**panic **mem**brane, **ear**drum, tympan/o, myring/o, eustachian tube, ear **os**sicles : **mal**leus, **in**cus, **stap**es
- Inner Ear : **coch**lea, **lab**yrinth
- Hearing : acoust/o, audit/o, audi/o, -cuis



## Eye-Ear-Nose-Throat (EENT)

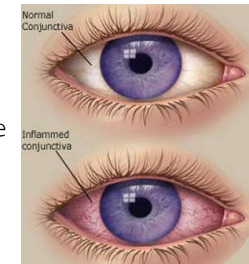
### 2. Structure and Function

- nose, **no**strils, **na**res (nair-eez), **na**sal **ca**vity, **sin**us
- **ol**factory = relating to the sense of smell
- nas**o**pharynx, oro**ph**arynx, laryngo**ph**arynx
- **lar**ynx, epiglottis, **vo**cal cord
- voice (n., v.), **vo**calize (v.), vocaliz**ation**, ph**ona**tion

## Eye-Ear-Nose-Throat (EENT)

### 3. Signs and symptoms

- Errors of refraction, **vis**ion (**vizh**) = -opia, -opsia
  - **my**opia = nearsightedness
  - **hyper**opia = farsightedness
  - **astig**matism
  - **presby**opia, presby/o = old age
- eye pain, ophthal**mal**gia
- pink eye, red eye, bloodshot eyes



### Eye-Ear-Nose-Throat (EENT)

#### 3. Signs and symptoms

- irri~~t~~ated eyes, itchy eyes, tear (n., v.), teardrop
- dry eye, xeroph~~th~~almia, xero- = dry
- an~~o~~opia, blind, ~~bl~~indness, color- , night-
- stra~~b~~ismus, di~~p~~lopia, double vision
- p~~t~~osis (~~sil~~ent p), drooping of the upper eyelid

### Eye-Ear-Nose-Throat (EENT)

#### 3. Signs and symptoms

- ear pain, ~~ear~~ache, ot~~al~~gia
- tin~~n~~itus, ringing of the ears
- otor~~r~~hea
- hearing loss
- deaf, deafness
- ~~ver~~tigo (ti), viti~~l~~igo (lie) = leukoderma

### Eye-Ear-Nose-Throat (EENT)

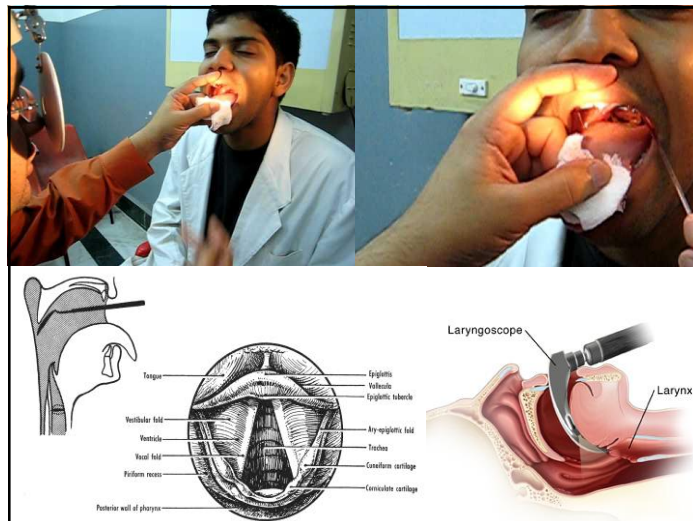
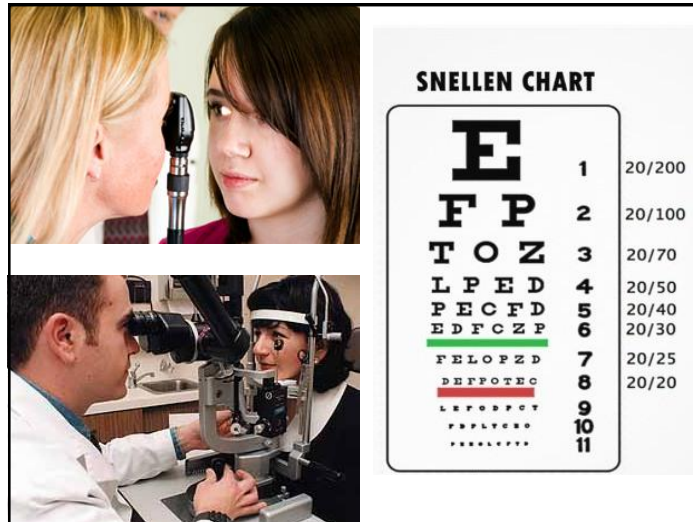
#### 3. Signs and symptoms

- rhinor~~r~~hea, runny nose (z)
- epist~~ax~~is, nosebleed
- ~~nas~~al conges~~t~~ion, stuffy nose
- snoring, obstructive sleep ~~ap~~nea
- sore throat, hoarseness, voiceless, ~~ap~~honia
- a foreign body in the eye, ear, nose, throat

### Eye-Ear-Nose-Throat (EENT)

#### 4. Lab investigation

- ophthal~~m~~oscopy (of), slit lamp mi~~cro~~scopy
- ~~vis~~ual ac~~ui~~ty test with Snellen chart
- ~~vis~~ual field test
- otoscope, otos~~cop~~ic, otoscopy, tuning fork test
- audi~~o~~metry, audi~~o~~meter, sonometer, ~~au~~diogram
- lary~~ng~~oscope, laryngoscopy, indirect



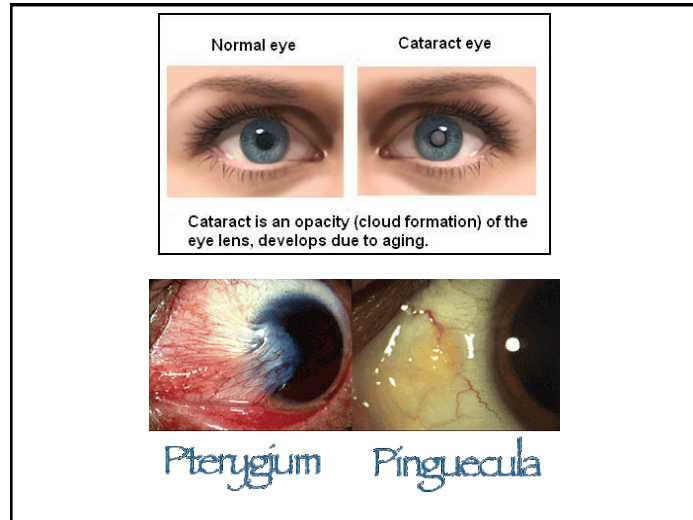
## Eye-Ear-Nose-Throat (EENT)

### 5. Diseases

- hordeolum, chalazion, sty or sty
- blepharitis, palpebritis, conjunctivitis, dacryocystitis, ophthalmitis, ophthalmia, keratitis, retinitis
- cataract
- glaucoma
- pinguecula, pterygium (rij)





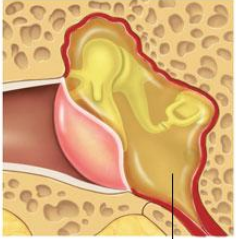


## Eye-Ear-Nose-Throat (EENT)

### 5. Diseases

- otitis media, otitis externa
- myringitis, tympanitis
- impacted cerumen
- presbycusis, presbycusia
- sinusitis
- pharyngitis
- laryngitis

**Otitis media**


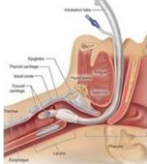


Infected fluid in middle ear

## Eye-Ear-Nose-Throat (EENT)

### 6. Medical and surgical procedures

- incision and curettage (sizz)
- phacoemulsification
- LASIK, laser in situ keratomileusis (shaping the cornea)
- rhinoplasty, nasal packing
- removal of foreign bodies
- endotracheal intubation, ET tube

## Eye-Ear-Nose-Throat (EENT)

### 7. Medications

- Ophthalmic preparations
  - eye drops, miotic – mydriatic, anti-glaucoma
- Ear preparations
  - ear drops, ceruminolytic
- Nasal preparations
  - nasal spray, nasal decongestion, decongestant
- Antihistamine