

Lesson 1.

SCOPE AND NATURE

LESSON AIM

To explain the scope and nature of terminology used in medicine and allied professions.

Medical Terminology is not only used in medicine by Doctors and nurses; but is also used in a wide range of associated professions. These related professions include Dentistry, Veterinary Care, Medical practice managers, Medical receptionists and many types of natural therapies.

This course is aimed to develop your awareness of terms not only used by Doctors and Nurses, but also by other allied professionals.

Anyone working in any of these professions will benefit from doing this course.

Origins of Words

There are two types of medical terms:

1. Eponyms
Words that are created by naming something after a person or after something else e.g. a disease named after the person who discovered it.
2. Medical terms created systematically using other words, or parts of (or derivations from) other words, typically Ancient Greek words or Latin words.

There has been a trend starting over the late 20th century, to replace eponyms with systematically constructed words e.g. Parkinson's disease has been renamed "paralysis agitans."

The advantage of a systematically constructed word is that the components of the word can tell us something about the meaning of the term.

By developing an understanding of the components that are commonly used in these systematically constructed words it is (in time) easier to both understand and remember the meanings of the terminology.

Structure of words

There are three parts to most medical terms:

1. The Word Root
This is usually the middle of the word and provides its core meaning.
2. The Prefix
This is normally at the start and commonly identifies a part of the core meaning.
3. The suffix
This comes at the end and modifies the core meaning (eg. What it is interacting with or what is happening to it).

Example:

The word myocarditis is constructed systematically from the following:

myo (prefix) means muscle
card (root) means heart
itis (suffix) means inflammation

By changing the prefix only, a new word (pericarditis) can be created.

Peri- means 'the outer layer', so Pericarditis is a condition where the outer layer of the heart is inflamed



SELF ASSESMENT.

Perform the self assessment test titled ‘test 1.1’ from the online training system.
If you find yourself getting the answers wrong, go over the notes from this lesson again or contact your tutor for assistance via the online training system.

PREFIX EXAMPLES

<i>Prefix</i>	<i>Meaning</i>	<i>application in a word</i>
ab-	away from	abnormal, aberrant
ad-	toward	adduction, adhesion
an- (also, a-)	absence or deletion of	anaemia, abortion
anti-	effective against	antihistamine, antibiotic
ar-	pertaining to	arrhythmia;
cardio- or cardi-	heart	cardiorespiratory, cardiac
Cyt	to do with the cell	cytology, cytoplasm
contra-	opposing	contraindication, contraction
acro- or acr-	to do with the extremities	acrodermatitis, acrocyanosis
derm or derma	to do with the skin	dermatosis, dermabrasion
gastro- or gastr-	to do with the stomach	gastroenteritis, gastroscope
hyper-	larger, more significant	hyperactive, hyperplasia
hypo-	lesser, deficient, below normal (opposite of hyper-)	hypotension, hypoplasia
leuko- or leuk-	white	leukocyte, leukaemia
nephr-	having to do with the kidney	nephritis, nephrolith
neur-	having to do with nerves	neuralgia, neuron



SELF ASSESMENT.

Perform the self assessment test titled ‘test 1.2’ from the online training system.
If you find yourself getting the answers wrong, go over the notes from this lesson again or contact your tutor for assistance via the online training system.

SUFFIX EXAMPLES

<i>Suffix</i>	<i>Meaning</i>	<i>Application in a Word</i>
-ology	study of	pathology, cardiology
-ologist	student of	pathologist, cardiologist
-algia	pain	neuralgia,
-ia	state or condition of	anaemia, hypochondria
-otomy	incision	episiotomy, lobotomy
-osis, or -y	condition of	dermatosis, neurosis, apathy
-tome	instrument that cuts	dermatome
-gram	record	PolyGram, histogram, electrocardiogram
-itis	inflammation	nephritis, dermatitis



SELF ASSESMENT.

Perform the self assessment test titled ‘test 1.3’ from the online training system.
If you find yourself getting the answers wrong, go over the notes from this lesson again or contact your tutor for assistance via the online training system.

SET READING:**Medical Terminology – Diagnostic Procedures**

A
Abdominal aortic aneurysm repair
Abdominal CT scan
Abdominal paracentesis
Abdominal ultra-sound
Acoustic neuroma removal
Adrenalectomy
Allergy testing
Amniocentesis
Amputation – foot, toe
Aneurysmectomy
Angiogram
Angiography
Angiography, MRI
Angioplasty
Aortic aneurysm repair or removal
Appendectomy
Arterial blood gases
Arteriography
Arthrocentesis
Arthroplasty- hip
Ascites fluid tap
Augmentation mammoplasty
Autopsy
B
Barium enema
Barium meal
Barium swallow
Barium x-ray
Biopsy
Biopsy - bone marrow
Biopsy - breast
Biopsy - endometrial
Biopsy – fine needle
Blood pressure measurement
Blood transfusion
Bone marrow transplant - BMT
Bone mineral density testing
Bone Scan
Bone scintigraphy
Brachytherapy
Breast augmentation
Breast X-ray
Bronchoscopy
Bunion Removal
Burn debridement
C
Cardiac catheterization
Cardiac stent
Cardioversion

Carotid endarterectomy
Carpal tunnel release
Cataract removal
Catheter angiography
Cerebrospinal fluid CSF analysis
Cerebrospinal fluid CSF tap
Cervical cryosurgery
Caesarean section
Chemotherapy
Chest x- ray
Childbirth – vaginal
Childbirth – caesarean section
Cholecystectomy
Cholesterol Testing
Circumcision
Closed joint aspiration
Cochlear implants
Colonoscopy
Colon polypectomy
Colon polyp removal
Colorectal resection
Computed tomography angiography (CTA)
Coronary angiogram
Coronary angiography
Coronary arteriography
Coronary artery by-pass graft- CABG
Coronary artery stent
C - Section
CT scan - abdomen
CT – Scan - head
Cystoscopy
Cystourethroscopy
D
D & C - Dilatation and curettage
Debridement
DEXA (DXA) - Dual energy x-ray absorptiometry - Bone densitometry
Diabetic control index
Diagnostic ultrasound of the abdomen
Dialysis
Doppler ultra-sound
E
Ear tubes surgery
ECG - Electrocardiogram
Echocardiogram
Electrocardiogram - EKG, ECG
Electroencephalogram -EEG
Electromyography - EMG
Electrophysiology study
Endometrial biopsy - skin
Excretory urography
Exercise tolerance test
Extracorporeal shock wave lithotripsy
Eye surgery – cataracts , glaucoma, repair of detached retina
F

Faecal occult blood test (FOBT)
Femoropopliteal by-pass
Fiberoptic joint examination
Fibroid tumour removal
Fine needle biopsy
Flat plate of the abdomen
Flexible sigmoidoscopy
Fracture reduction
Fracture repair
Fundoplication
G
Gastrostomy
Glaucoma surgery
Glycosylated haemoglobin test
H
Hallux valgus repair
Hammertoe correction
HbA1c - Glycohaemoglobin testing.
Heart – lung transplant
Heart transplant
Heart valve repair
Haemorrhoid banding
Haemorrhoid ligation
Hernia repair
Herniorrhaphy
Hip replacement
Human Papillomavirus testing
Hysterectomy
Hysterosalpingography
HPV testing
I
Ileum surgery
Infection debridement
Ingrown toenail removal
Intramuscular injection
Intravenous pyelogram – IVP
Intravenous urography - IVU
In Vitro fertilisation – IVF
Ionizing radiation
K
Kidney dialysis
Kidney stone removal - lithotripsy
Kidney transplant
Kidney ultra-sound
Knee arthroplasty
Knee replacement
L

Laminectomy
Laparoscopy
Laryngectomy
Laryngoscopy
Laser assisted in situ keratomileusis - LASIK
Leg artery by-pass surgery
Lipid testing
Lithotripsy for kidney stones
Liver transplant
Lower GI endoscopy
Lower leg venography
Lumbar puncture
Lumpectomy
Lung surgery
Lung transplant
M
Magnetic resonance angiography (MRA)
Magnetic Resonance Imaging (MRI)
Mammogram
Mammography
Mastectomy
Melanoma removal
Meniscectomy
Meniscus removal
Middle ear repair
Morton's neuroma removal
MRI scan
Mycocardial perfusion imaging
Myomectomy
Myringotomy
N
Neurolemmoma
O
P
Pacemaker insertion
Papanicolaou test
Pap screening
Pap smear
Pap test
Partial mastectomy
Percutaneous endoscopic gastrostomy - PEG
Pulmonary function test - PFT
Phlebography
Positron emission tomography - PET scan
Prostatectomy - prostate removal
Prostate specific antigen test - PSA
Pulmonary Function Test - PFT
Punch biopsy - skin
R
Radiation therapy
Radionuclide bone scan

Radiotherapy
Reduction mammoplasty
Renal ultra-sound
Retinal detachment repair
Rhinoplasty
Root canal
Rotator cuff repair
S
Salpingo - oophorectomy
Sentinel lymph node biopsy
Shave biopsy - skin
Sigmoidoscopy - flexible
Skin biopsy
Skin Graft
Skin lesion biopsy
Skin lesion removal
Small intestine surgery
Sonogram
Spinal anaesthesia
Spinal tap
Splenectomy
Stool occult blood test
Subcutaneous injection
Surgical removal - breast
Surgical removal - meniscus
Surgical removal - spleen
Surgical removal - Prostata
Surgical removal -Thyroid
Surgical removal – Tonsil
Surgical removal - Uterus
Surgical repair - tendon
Surgical sterilisation
T
Tendon repair
Thoracotomy
Thyroidectomy
Tonsillectomy
Tooth extraction
Tracheotomy
Transplant – bone marrow
Transplant – heart, heart – lung, kidney, lung
Transurethral resection of the Prostate - TURP
Tubal ligation
Tympanoplasty
Tympanostomy
Tympanotomy
U
Ultra-sound
Ultra-sound - doppler
Ultra-sound - renal
Upper gastrointestinal (GI) endoscopy
Upper gastrointestinal (GI) series

V
Vasectomy
Venogram
Vestibular schwannoma
Venous duplex ultrasound
W
Wound debridement

SET TASK

1. Using the internet, library and any other resources within your reach try to gain a broad understanding of the structure of medical terminology. Utilise the information you have researched and a medical terminology dictionary to understand any terms you have difficulty with.
2. Carry out research on the internet or at a local library into relevant career opportunities.
3. Pronunciation ...Use the local library/internet to learn the pronunciation for the different terminology you learnt in this lesson
4. Refer to the “MEDICAL TERMINOLOGY – DIAGNOSTIC PROCEDURES” information provided in this lesson. Select one term from each of the letters A – E that you are unfamiliar with and find the meaning of this term. The purpose of this set task is to familiarise yourself with the terminology of medical diagnostic procedures. While you will not be asked to submit your answers for this set task, and are not required to remember the terms by rote, you should be aiming to broaden your knowledge of the world of medical terminology. Throughout the course you will be required to use this information in a similar way.