

Fifth Lecture

5. Prefixes (Cont'd)

Summary of previous lectures

In the previous lectures we talked about the basic elements of the medical word: word root, combining form, suffix, and prefix. The meaning of a word is determined by how these elements are combined. Detailed information about suffixes is mentioned. Suffix linking and suffix types are explained in detail and many examples related to the surgical, diagnostic, pathological, grammatical and plural suffixes are also provided. Detailed information about prefixes is also mentioned. Prefix linking and prefix types are explained in detail and many examples related to different types of prefixes are provided.

5.1.1. Prefixes of position, number and measurement, and direction (Cont'd)⁶⁶

Table 5-1: Examples of commonly used prefixes of direction as well as their meanings and word analyses

Prefix (Meaning)	Word (Arabic ⁶⁷)	Pronunciation ⁶⁸	Analysis
ab- (from, away from)	ab/duction (تَبْعِيد)	æb'dʌkʃn	movement of a limb away from (an axis of) the body -duction: act of leading, bringing, conducting
ad- (toward)	ad/duction (تَقْرِيْب)	ə'dʌkʃən	movement of a limb toward (an axis of) the body -duction: act of leading, bringing, conducting
circum- (around)	circum/ren/al (حَوْلَ الكُلَيْبَةِ)	'sɜ:kəm'ri:nl	pertaining to around the kidney ren: kidney -al: pertaining to

⁶⁶ Medical Terminology Systems - A Body Systems Approach: Prefixes – Prefix types - Prefixes of Position, Number, Measurement, and Direction p.30

⁶⁷ <http://www.emro.who.int/Unified-Medical-Dictionary.html>

⁶⁸ Oxford Advanced Learner's Dictionary, 8th ed. or: <http://dictionary.reference.com/>

peri-:	peri/odont/al (دَوَاعِمِ السِّنِّ)	ˌperiəˈdɒntl	pertaining to around a tooth odont: teeth -al: pertaining to
dia- (through, across)	dia/rrhea (إسهال)	ˌdaɪəˈrɪə	flow through -rrhea: discharge, flow Diarrhoea is a condition of abnormally frequent discharge or flow of fluid faecal matter from the bowel.
trans-	trans/vagin/al (بَطْرِيْقِ الْمَهْيَلِ)	ˌtrænzvəˈdʒaɪnl	pertaining to across or through the vagina ⁶⁹ vagin: vagina; -al: pertaining to
ecto- (outside, outward)	ecto/gen/ous (خَارِجِي الْمَنْشَأِ)	ekˈtɒdʒənəs	forming outside the body or structure gen: forming, producing, origin -ous: pertaining to, An ectogenous infection is one that originates outside of the body.
exo-	exo/tropia (حَوَّلَ خَارِجِي؛ خَزَرَ)	ˌeksəˈtrɒpiə	turning outward (of one or both eyes) -tropia: turning
extra-	extra/crani/al (خَارِجِ الْقَافِ)	ˌekstrəˈkreɪniəl	outside the skull crani: cranium (skull) -al: pertaining to
endo- (in, within)	endo/crine (صَمَاءِ)	ˈendəʊkrɪn	secrete ⁷⁰ within -crine: secrete Endocrine describes a gland that secretes directly into the bloodstream.
intra-	intra/muscul/ar (دَاخِلِ الْعَضَلِ؛ عَضَلِيّ)	ˌɪntrəˈmʌskjələ(r)	within the muscle muscul: muscle -ar: pertaining to
para- ⁷¹ (near, beside; beyond)	para/nas/al (مَجَاوِرِ لِلْأَنْفِ)	ˌpærəˈneɪzl	beside the nose nas: nose -al: pertaining to
super- (upper, above)	super/ior (عُلْوِيّ)	suːˈpiəriə(r)	pertaining to the upper part of a structure -ior: pertaining to
supra- (above; excessive; superior)	supra/ren/al (فَوْقَ الْكَلْبِيَّةِ، كُطْرِيّ)		pertaining to above the kidney ren: kidney -al: pertaining to

⁶⁹ Vagina: /vəˈdʒaɪnə/ the passage in the body of a woman or female animal between the outer sex organs and the womb

⁷⁰ Secrete: /sɪˈkri:t/ to produce a liquid substance

⁷¹ Para- may also be used as a suffix meaning to bear (offspring)

ultra- (excess, beyond)	ultra/son/ic (فَوْقَ صَوْتِي)	ˌʌltrəˈsɒnɪk	pertaining to sound beyond (that which can be heard by the human ear) son: sound -ic: pertaining to
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5.1.2. Other common prefixes

Many other common prefixes may also be used to change the meaning of a word. See [Table 5-2](#) for a list of some other common prefixes.

Table 5-2: Examples of other commonly used prefixes along with their meanings and word analyses

Prefix (Meaning)	Word (Arabic)	Pronunciation	Analysis
a- ⁷² (without, not)	a/mast/ia (الْجِدَامُ النَّدِي)	əˈmæstiə	without a breast mast: breast -ia: condition Amastia may be the result of a congenital ⁷⁴ defect, an endocrine ⁷⁵ disorder ⁷⁶ , or mastectomy ⁷⁷ .
an- ⁷³	an/esthesia (تَخْدِير)	ˌænəsˈθi:ziə	without feeling -esthesia: feeling Anaesthesia may be a partial ⁷⁸ or complete loss of sensation with or without loss of consciousness ⁷⁹ .

⁷² The prefix a- is usually used before a consonant

⁷³ The prefix an- is usually used before a vowel

⁷⁴ Congenital: /kənˈdʒenɪtl/ (of a disease or medical condition) existing since or before birth

⁷⁵ Endocrine: /ˈendəʊkrɪn/ connected with glands that put hormones and other products directly into the blood

⁷⁶ Disorder: /dɪsˈɔːdə(r)/ (medical) an illness that causes a part of the body to stop functioning correctly

⁷⁷ Mastectomy: /mæˈstektəmi/ a medical operation to remove a person's breast

⁷⁸ Partial: /ˈpɑːʃl/ not complete or whole

⁷⁹ Consciousness: /ˈkɒŋʃənsəs/ the state of being able to use your senses and mental powers to understand what is happening

anti- (against)	anti/bacteri/al (مُضَادُّ الْجَرَائِمِ)	ˌæntɪbæk'tɪəriəl	against bacteria bacteri: bacteria -al: pertaining to Antibacterials are substances that kill bacteria or inhibit ⁸⁰ their growth or replication ⁸¹ .
contra-	contra/ception (مَنْعُ الْحَمْلِ)	ˌkɒntrə'sepʃn	against conception ⁸² or impregnation ⁸³ -ception: conceiving Contraceptive techniques prevent pregnancy by means of medication, a device, or a method that blocks or alters one or more of the processes of reproduction.
brady- (slow)	brady/cardia (بُطْءُ الْقَلْبِ)	ˌbrædɪ'kɑ:diə	slow heart rate -cardia: heart
dys- (bad; painful; difficult)	dys/tocia (عُسْرُ الْوِلَادَةِ)	dɪs'təʃə	difficult childbirth -tocia: childbirth, labour
eu- (good, normal)	eu/pnea (سَوَائِيَّةُ التَّنَفُّسِ)	ju:p'niə	normal breathing -pnea: breathing
hetero- (different)	hetero/graft (طُعْمٌ عَبْرَوِيٌّ)	'hetərəʊ'grɑ:ft	different transplant ⁸⁴ -graft: transplantation A heterograft, also called a xenograft, is a transplant of tissue from another species ⁸⁵ that is used as a temporary graft in certain cases, as in treating a severely burned patient when tissue from the patient or from a tissue bank is not available.

⁸⁰ Inhibit: /ɪn'hɪbɪt/ to prevent sth from happening or make it happen more slowly or less frequently than normal

⁸¹ Replication: /'replɪkət/ (of a virus or a molecule) to produce exact copies of itself

⁸² Conception: /kən'sepʃn/ the process of an egg being fertilized inside a woman's body so that she becomes pregnant

⁸³ Impregnate: /'ɪmpregneɪt/ to make a woman or female animal pregnant

⁸⁴ Transplant: /træns'plɑ:nt/ a medical operation in which a damaged organ, etc. is replaced with one from another person; an organ, etc. that is used in a transplant operation

⁸⁵ Species: /'spi:ʃi:z/ a group into which animals, plants, etc. that are able to breed with each other and produce healthy young are divided, smaller than a genus and identified by a Latin name

homo- (same)	homo/graft (طَعْمٌ مِثْلِي)	'hɒməˌgrɑːft	same transplant -graft: transplantation A homograft, also called an allograft, is a transplant of tissue obtained from a member of the patient's own species. Commonly transplanted organs include bone, kidney, lung, and heart. Recipients take immunosuppressive ⁸⁶ drugs to prevent tissue rejection.
homeo-	homeo/plasia (تَنْسُجٌ مِثْلِي)	ˌhəʊmiəˈpleɪzə	formation of new tissue similar to that already existing in a part -plasia: formation, growth
mal- (bad)	mal/nutrition (سوءُ التَّغْذِيَةِ)	ˌmælnjuːˈtrɪʃn	bad nutrition ⁸⁷ Malnutrition refers to any disorder resulting from an inadequate or excessive intake ⁸⁸ of food.
pan- (all)	pan/arthr/itis (الْتِهَابُ المَفَاصِلِ الشَّامِلِ)	pænəːˈθraɪtɪs	inflammation of all (or many) joints arthr: joint -itis: inflammation
pseudo- (false)	pseudo/cyesis (حَمْلٌ كاذِب)	ˌsjuːdəʊsəɪˈiːsɪs	false pregnancy ⁸⁹ -cyesis: pregnancy Pseudocyesis is a condition in which a woman believes she is pregnant when she is not and begins to develop all the physical characteristics associated with pregnancy.
syn- ⁹⁰ (union, together, joined)	syn/dactyl/ism (ارْتِفَاقُ الأصَابِعِ)	sɪnˈdæktɪlɪzəm	condition of joined fingers or toes dactyl: fingers; toes -ism: condition Syndactylylism varies in degree of severity from incomplete webbing of the skin of two digits ⁹¹ to complete union of digits and fusion of the bones and nails.
tachy- (rapid)	tachy/pnea (تَسْرُغُ النَّفْسِ)	ˌtækɪpˈniə	rapid breathing -pnea: breathing

⁸⁶ Immunosuppressive: /ˌɪmjʊnəsəˈpresɪv/ any drug used for immunosuppression (/ˌɪmjʊnəsəˈpreʃən/ medical suppression of the body's immune system, esp in order to reduce the likelihood of rejection of a transplanted organ); suppress: /səˈpres/ to prevent sth from growing, developing or continuing

⁸⁷ Nutrition: /njuˈtrɪʃn/ the process by which living things receive the food necessary for them to grow and be healthy

⁸⁸ Intake: /ˈɪnteɪk/ the amount of food, drink, etc. that you take into your body

⁸⁹ Pregnancy: /ˈpregnənsi/ the state of being pregnant (/ˈpregnənt/ (of a woman or female animal) having a baby or young animal developing inside her/its body)

⁹⁰ The prefix syn- appears as sym- before b, p, ph, or m

⁹¹ Digit: /ˈdɪdʒɪt/ (anatomy) a finger, thumb or toe