

ANATOMY · TERMINOLOGY · ILLUSTRATED GUIDE

ANATOMICAL TERMINOLOGY

Veterinary Anatomy Terminology: Latin and Greek Roots, Decoded (PDF)

Veterinary terms come from two languages that behave completely differently. Greek clinical words are built from parts — gastr/o/enter/itis — and you decode them by reading the suffix first. Inside: Four labelled figures, nine reference tables and a 16-question self-test.

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IN SHORT

Veterinary terms come from two languages that behave completely differently. **Greek** clinical words are *built from parts* — *gastr/o/enter/itis* — and you decode them by reading the suffix first. **Latin** anatomical names are *not built from parts at all*: they are a **head noun with modifiers hung on it** — some adjectives that agree with it, some nouns in the genitive, some nouns simply renaming it — as in *musculus extensor carpi radialis longus*. Learn the twenty commonest roots and you can read hundreds of terms you have never been taught.

KEY POINTS

1. A Greek clinical term has up to four parts: **prefix, root, combining vowel, suffix**. Read the **suffix first**, then work backwards.
2. The **combining vowel carries no meaning**. It exists only to make the word sayable, which is why dropping it never changes the sense.
3. Drop it before a suffix that already starts with a vowel (*gastric*), keep it before one that does not (*gastrology*), and **always keep it between two roots**.
4. Latin anatomical names follow a different system entirely: a **head noun** with modifiers — agreeing adjectives, genitive nouns, or a second noun renaming the first. There is nothing to break apart.
5. A genitive ending such as *carpi* means “**of the**”.
6. As a strong tendency, **Latin names the parts and Greek describes what goes wrong** — but the two are mixed, and the official Latin nomenclature itself contains Greek roots.
7. Species adjectives are Latin: *Canis familiaris* gives canine, *Bos taurus* bovine — though a few, such as **porcine** and **leporine**, come from a different Latin word than the binomial does.
8. **Not every term breaks down neatly**. Decode first, then sanity-check the answer.

About the images

All four figures were drawn for this guide rather than photographed from a book, so the type stays sharp and legible on a phone. The word parts and rules in Figures 1 and 2 are from Taibo's *Veterinary Medical Terminology Guide and Workbook*; the Latin terms, definitions, species codes and the sample entry in Figures 3 and 4 are from the *Illustrated Veterinary Anatomical Nomenclature* (Schaller & Constantinescu, Thieme), the illustrated companion to the *Nomina Anatomica Veterinaria*. Each figure is credited beneath it.

What you should be able to do after reading this

Name the four parts a term can have · decode an unfamiliar clinical term without being told what it means · say why *gastric* loses its *o* and *gastroenterology* keeps two · explain why a Latin anatomical name cannot be decoded the same way · translate *musculus extensor carpi radialis longus* word by word · give the correct adjective for any of the eight domestic species · and get the plural of *foramen* and *corpus* right under exam pressure.

Veterinary medicine is taught in a vocabulary nobody speaks. That is deliberate. The Latin names are maintained as an international standard by the World Association of Veterinary Anatomists, revised on purpose rather than by fashion, so *musculus biceps brachii* means the same structure in every veterinary school on earth. The cost is that the vocabulary arrives faster than anyone can memorise it, and is quietly assumed from then on.

The short answer. Almost all of it comes from two languages that behave in opposite ways. **Greek** gives you clinical words that are *assembled from interchangeable parts*, so they can be taken apart. **Latin** gives you the names of structures, which are *largely not assembled from parts* — they are short inflected phrases. (Largely, not wholly: Latin has compounds of its own, such as *brachiocephalicus*.) Most terminology guides teach only the first and leave students to guess at the second, which is the half the atlas is actually written in.

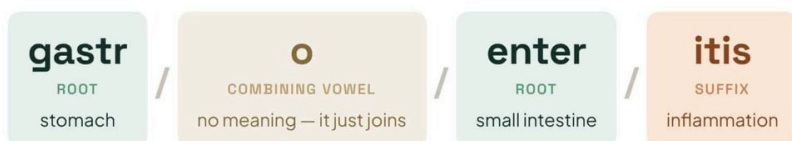
Looking for cranial, caudal, dorsal and palmar? Those are directional terms and they have a companion guide of their own — anatomical planes and directional terms. This page is about how the words themselves are built.

01 The anatomy of a term

A clinical term can carry four kinds of part. Not all four appear every time: there is almost always an identifiable root, and the rest are optional.

THE GREEK PATTERN — A CLINICAL TERM

Built from parts. Break it at the slashes and read it backwards.



Read the suffix first, then work back: inflammation → of the small intestine → and the stomach. The combining vowel is kept between two roots, and it survives before *-logy* but is dropped before a suffix that already starts with a vowel — *gastric*, not *gastroic*.

gastroenteritis = inflammation of the stomach and small intestine

Fig 1 — One clinical term, taken apart. The **root** carries the meaning — here two of them, *gastr*(stomach) and *enter*(small intestine). The **suffix** says what is happening to it: *-itis*, inflammation. Between them sits the **combining vowel**, almost always an *o*, which **means nothing at all** — it is there only to make the word pronounceable. A **prefix** would go on the front to modify the rest. Read the suffix first and work backwards and the definition assembles itself.

Diagram — Vet-eBooks.com, built for this guide. The word parts and the rules it illustrates are from Taibo A. *Veterinary Medical Terminology Guide and Workbook*, 2nd ed. Wiley.

02 The five rules

Five rules cover most of what you need. The first three are mechanical, the fourth is a convention, and the fifth is the honest one.

1 • Drop the combining vowel before a vowel

If the suffix already begins with a vowel, the combining vowel goes. *Gastr/o + -ic* becomes **gastric**, not *gastroic*. If the suffix begins with a consonant, the vowel stays: *gastr/o + -logy* = **gastrology**.

2 • Read the suffix first, then work back

Define the suffix, then the prefix, then follow through the roots. *Subgastric* reads as “pertaining to” → “below” → “the stomach”. This works about nine times out of ten, which is worth knowing precisely because it is not ten.

3 • Keep the combining vowel between two roots

Rule 1 applies to the join before a *suffix*. Between two *roots* the vowel always survives, even though the second root begins with a vowel: **gastr/o/enter/o/logy**.

4 • List the roots in anatomical order

Where a term describes a pathway, the roots usually follow the order of the structures in the body: *gastroenterology*, because the stomach comes before the small intestine. It is a strong habit rather than a law — *myocarditis* and *cardiomyopathy* name the same tissue with the roots the other way round, so check an established term rather than reordering it yourself.

5 • Not everything breaks down neatly

Orthopaedic is *orth/o* (straight) + *paed* (child) + *-ic*, which is a fair description of what the speciality once did and no description at all of what it does now. Decode the term first, then sanity-check the result against what you already know.

03 Saying it out loud

Reading a term silently is half the job. You will be asked to say these words in a tutorial, in theatre and in front of a client, and the article would be incomplete without saying how.

Three habits that get you most of the way

1. Say every vowel. Latin has no silent letters, so *rete* is RAY-tay and *vena cava* is VAY-na KAY-va. **2. A final -e is pronounced** — *vena cavae* ends in a spoken syllable, not a silent e. **3. Break a long word at its parts before you say it:** gastro · entero · logy is four easy pieces, not one hard word.

TERM	SAY IT	THE CATCH
<i>Musculus</i>	MUSS-kew-luss	Three syllables, not two
<i>Vena cava</i>	VAY-na KAY-va	Latin <i>a</i> is broad, as in <i>father</i>
<i>Rete mirabile</i>	RAY-tay mih-RAB-ill-ay	Both final <i>es</i> are spoken
<i>Cornu</i>	KOR-noo	<i>u</i> is <i>oo</i> , never <i>yoo</i>
<i>Cervicis</i>	SER-vih-kiss	The <i>c</i> before <i>i</i> softens in the traditional English usage
<i>Ileum / ilium</i>	ILL-ee-um / ILL-ee-um	They sound the same — which is exactly why you must spell them apart
<i>Gastroenteritis</i>	GAS-tro-en-ter-EYE-tiss	Break it at the parts and it says itself
<i>Cholecystectomy</i>	KOH-lee-siss-TEK-tuh-mee	The longest word most students meet in year one

Do not be paralysed by it. Classical and traditional pronunciations differ, teaching hospitals differ, and countries differ — a Dutch and a Brazilian vet will not say *musculus* identically and both will be understood. Say it clearly, consistently, and loudly enough to be corrected once.

04 The Latin half: naming a structure

Now the half that terminology guides skip. Open any atlas and the structures are not named in assembled Greek at all — they carry short Latin descriptions, and none of the rules above apply to them.

THE LATIN PATTERN — AN ANATOMICAL NAME

Nothing is assembled from parts. Each word is a whole Latin word, and they do three different grammatical jobs.



Only the blue words agree. *Radialis* and *longus* change their endings to match the head noun — *musculus longus*, but *vena longa* and *ligamentum longum*. *Carpi* never changes: it is a genitive, locked to “of the carpus”. And *extensor* is a noun, not a description — it names what the muscle *is*, the way “the surgeon, an extensor” would.

= the long muscle on the radial side that extends the carpus

Fig 2 — One anatomical name, and the three grammatical jobs inside it. There are no slashes here and no combining vowel, because nothing has been assembled — and the words are not all doing the same job. *Musculus* is the **head noun**. *Extensor* is a second noun **in apposition**, renaming it. *Carpi* is a noun in the **genitive**, “of the carpus”, and it never changes. Only *radialis* and *longus* are **adjectives**, and only they have to agree with the head noun — which is why the ending moves when the noun does: *musculus longus*, but *vena longa* and *ligamentum longum*.

Diagram — Vet-eBooks.com, built for this guide. The word parts and the rules it illustrates are from Taibo A. Veterinary Medical Terminology Guide and Workbook, 2nd ed. Wiley.

Three jobs, not one — and it is worth separating them

It is tempting to call everything after the head noun “adjectives”. They are not. In *musculus extensor carpi radialis longus* there are **three** different grammatical jobs: **radialis** and **longus** are adjectives and must *agree* with the head noun, so their endings change when the noun does; **carpi** is a *noun in the genitive*, meaning “of the carpus”, and it never changes; and **extensor** is a *noun in apposition* — a second noun renaming the first, the way “my sister, the surgeon” works in English. Knowing which is which is what stops you inventing endings that do not exist.

Why longus is there at all

An adjective in an anatomical name is never decoration — it is doing a job of separation. *Longus* exists because there is a *brevis*. The nomenclature records that the extensor carpi radialis longus and brevis are **separate muscles in the cat** and **partially fused in the dog**, so the distinction the adjective makes is sharper in one species than the other. When you meet an unfamiliar adjective, the useful question is always: what is this one telling me apart from?

THE LATIN PATTERN — ONE NOUN, MANY ADJECTIVES

Learn the noun once and every name built on it becomes readable.

Regio a region of the body THE HEAD NOUN	frontalis over the frontal bone	parietalis over the parietal bone
	occipitalis over the occipital bone	temporalis over the temporal bone and muscle
	masseterica over the masseter muscle	buccalis the cheek
	maxillaris over the maxilla	mandibularis over the body of the mandible

IN THE PLURAL, THE ADJECTIVE MOVES WITH ITS NOUN — BOTH CHANGE

regio frontalis → *regiones frontales* · *planum dorsale* → *plana dorsalia* · *foramen intervertebrale* → *foramina intervertebralia*

Fig 3 — One noun, eight adjectives. This is the whole Latin pattern in one frame. *Regio* is the noun; everything to the right of it is an adjective agreeing with it, and each one is glossed in English exactly as the nomenclature glosses it. **Learn the noun once and all eight names become readable** — and the same trick works for *musculus*, *nervus* and *arteria*. The strip underneath shows what agreement means in practice: when the phrase goes plural, **both words change together** — *regio frontalis* becomes *regiones frontales*, not *regiones frontalis*.

Diagram — Vet-eBooks.com, drawn for this guide. Regional terms and their definitions taken from Schaller O, Constantinescu GM (eds.). Illustrated Veterinary Anatomical Nomenclature, 4th ed. Thieme — the illustrated companion to the Nomina Anatomica Veterinaria.

05 Common Latin words in anatomical names

A small number of Latin words do an enormous amount of work, and they are nouns and adjectives in their own right rather than roots to be assembled. Every one of these appears in the first weeks of a dissection course, and most appear on every page of an atlas.

LATIN WORD	IT MEANS	WHERE YOU MEET IT
<i>Musculus</i>	Muscle	Abbreviated M. , and Mm. in the plural. <i>Nervus</i> , <i>arteria</i> and <i>vena</i> work the same way: N. , A. , V.
<i>Os</i> genitive <i>ossis</i>	Bone	Every bone name. Do not confuse it with the other <i>os</i> , meaning mouth — they are different words that look identical
<i>Caput</i> · <i>collum</i> · <i>corpus</i>	Head · neck · body	Not just of the animal: bones and organs have them too — the head, neck and body of the femur
<i>Facies</i>	Surface, or face	<i>Facies articularis</i> , the articular surface. It appears on almost every bone description
<i>Margo</i> · <i>pars</i>	Border · part	<i>Margo cranialis</i> ; <i>pars thoracis</i> . Two of the commonest words in the whole nomenclature
<i>Foramen</i> · <i>fossa</i> · <i>sulcus</i>	Opening · hollow · groove	The three words for a hole, a dip and a channel. Plural: <i>foramina</i> , <i>fossae</i> , <i>sulci</i>
<i>Processus</i> · <i>tuberculum</i> · <i>ramus</i>	Projection · small swelling · branch	Bony landmarks and the branches of nerves and vessels
<i>Articulatio</i>	Joint	<i>Articulatio genus</i> , the stifle joint. The Greek equivalent is arthr/o
<i>Linea</i> · <i>lamina</i>	Line · plate	<i>Linea alba</i> , the white line of the ventral midline; the lamina of a vertebra

LATIN WORD	IT MEANS	WHERE YOU MEET IT
<i>Ligamentum</i>	A fibrous band connecting bones or cartilages — and also a fold of peritoneum	Abbreviated Lig. . The second half of that definition is why the liver and stomach have ligaments too
<i>Longus · brevis · major · minor</i>	Long · short · greater · lesser	The paired adjectives that exist to tell two similar structures apart
<i>Dexter · sinister</i>	Right · left	Always the animal's own right and left, never the viewer's

HOW TO READ AN ENTRY IN THE NOMENCLATURE

Every atlas entry carries five different kinds of information at once.

18 **M.** **extensor carpi radialis longus** . **Medial division in** **fe** , **medial tendon in** **ca** , **inserts on** **metacarpal II** . **B F**

- 18** — the number printed beside this structure on the facing plate. The plate carries numbers, not words; this list is how you turn them into names.
- M.** — the **Latin name** itself — noun plus agreeing adjectives, exactly as in Figure 2.
- fe** and **ca** are the species codes: *Felis catus* and *Canis familiaris*. This entry is telling you the muscle differs between cat and dog.
- M.** = *musculus*. The nomenclature abbreviates the noun: **M.** muscle, **N.** nerve, **A.** artery, **V.** vein, **Lig.** ligament. Plural doubles it — **Mm.**
- Medial division in** **fe** , **medial tendon in** **ca** , **inserts on** **metacarpal II** . **B F** — The **English description**, which is where the species differences are recorded.
- B F** — which plates in the book illustrate it. Miss these and you miss the pictures.

Fig 4 — One entry, five kinds of information. This is what you are actually looking at when you open the nomenclature, taken apart. The **number** keys into the facing plate — the plate carries numbers, not words, so this list is how you turn them into names. **M.** is *musculus*; the same convention gives **N.**, **A.**, **V.** and **Lig.**, and doubling it makes the plural. Then the **Latin name**, then an **English description** — and buried in that description are the **species codes**: this entry is quietly telling you the muscle is not the same in the cat as in the dog. Miss the codes and you miss the species differences entirely.

Diagram — Vet-eBooks.com, drawn for this guide. The entry for *M. extensor carpi radialis longus*, and the species abbreviations taken from Schaller O, Constantinescu GM (eds.). *Illustrated Veterinary Anatomical Nomenclature*, 4th ed. Thieme — the illustrated companion to the *Nomina Anatomica Veterinaria*.

06 The Greek half: describing what went wrong

These are the parts that assemble. Learn the twenty or so below and most of the clinical vocabulary of the first two years stops being new information.

COMBINING FORM	IT MEANS	A TERM YOU WILL MEET
cardi/o	heart	<i>cardiology, cardiomyopathy</i>
gastr/o	stomach	<i>gastritis, gastrotomy</i>
enter/o	small intestine	<i>enteritis, gastroenteritis</i>
hepat/o	liver	<i>hepatopathy, hepatitis</i>
nephro · ren/o	kidney	<i>nephrectomy</i> , but <i>renal</i> Both mean kidney. <i>Ren-</i> gives <i>renal</i> ; <i>ren/o</i> also gives <i>renogram</i> and <i>renography</i> . <i>Nephro/o</i> takes most of the rest
oste/o	bone	<i>osteotomy, osteoarthritis</i>
arthr/o	joint	<i>arthrocentesis, arthroscopy</i>
derm/o · dermat/o	skin	<i>dermatology, pyoderma</i>

COMBINING FORM	IT MEANS	A TERM YOU WILL MEET
neur/o	nerve	<i>neurology, neuropathy</i>
encephal/o	brain	<i>encephalitis</i>
cyst/o	urinary bladder — or a fluid-filled sac	<i>cystocentesis</i> taps the bladder; an ovarian <i>cyst</i> is not a bladder at all. Context decides
myel/o	bone marrow — or the spinal cord	<i>myelography</i> images the spinal cord; <i>myelosuppression</i> is the marrow. A classic exam trap
haem/o · haemat/o	blood	<i>haematology, haemoabdomen</i> Written hem-/hemat- in American texts

Then the parts that attach to them. A prefix modifies from the front; a suffix says what is happening.

PART	IT MEANS	IN USE
a-, an-	no, not, without	<i>anuria</i> — no urine produced
hyper-	above, excessive	<i>hyperthyroidism</i>
hypo-	deficient, below normal	<i>hypocalcaemia</i>
endo- · intra-	within	<i>endoscopy · intravenous</i>
peri-	around	<i>pericardium</i> — around the heart
sub- · epi-	below · above, upon	<i>subcutaneous · epidural</i>
-itis	inflammation	<i>dermatitis, cystitis</i>
-ectomy	removal, excision	<i>ovariectomy</i>
-otomy	cutting into	<i>laparotomy</i> -ectomy takes it out; -otomy only opens it
-ostomy	surgically making an opening (a stoma), which may be temporary or permanent	<i>colostomy, gastrostomy</i>
-centesis	puncture to remove fluid or gas	<i>cystocentesis, abdominocentesis</i>
-pathy · -osis	disease of · abnormal condition	<i>nephropathy · arthrosis</i>
-megaly	enlargement	<i>cardiomegaly, hepatomegaly</i>
-aemia	a blood condition	<i>uraemia, bacteraemia</i>

07 Which language, and when

Here is the rule of thumb that makes the whole vocabulary tractable, followed immediately by its limits, because a rule presented without its exceptions is how students get caught out.

Latin names the parts; Greek describes what goes wrong. The structure in the atlas is *ren* or *hepar*; the disease in the record is *nephropathy* or *hepatitis*. The structure is *cor*; the enlargement is *cardiomegaly*. This is a genuinely useful bet, and it is why the same organ often seems to have two unrelated names.

That is why one organ can look like two subjects. The kidney is *ren* when you name it and *nephr-* when something is wrong with it, so a **renal** artery and a **nephrectomy** are the same organ in two languages. Learn the pairs and half the vocabulary stops being new.

THE STRUCTURE	ITS LATIN NAME, AS THE ATLAS PRINTS IT	THE GREEK FORM, AS THE CLINIC USES IT
Heart	<i>Cor</i>	cardi/o <i>cardiology, cardiomegaly</i>
Kidney	<i>Ren</i> → renal	nephr/o <i>nephrectomy, nephropathy</i>
Liver	<i>Hepar</i>	hepat/o <i>hepatitis, hepatomegaly</i>
Skin	<i>Cutis</i> → subcutaneous	dermat/o <i>dermatitis, dermatology</i>
Brain	<i>Encephalon</i>	encephal/o <i>encephalitis</i>
Urinary bladder	<i>Vesica urinaria</i> → vesical	cyst/o <i>cystocentesis, cystitis</i>
Muscle	<i>Musculus</i>	my/o <i>myopathy, cardiomyopathy, myositis</i>
Nerve	<i>Nervus</i>	neur/o <i>neurology, neuropathy</i>
Blood	<i>Sanguis</i> → sanguineous	haem/o <i>haematology, haemoabdomen</i>
Bone	<i>Os</i> → osseous	oste/o <i>osteotomy, osteoarthritis</i>
Joint	<i>Articulatio</i> → articular	arthr/o <i>arthrocentesis, arthroscopy</i>
Lung	<i>Pulmo</i> → pulmonary	pneumon/o <i>pneumonia, pneumothorax</i>

Two of those Latin names are Greek

Look at *hepar* and *encephalon*. Both are Greek words, and both are the *official Latin* names in the nomenclature — which is the same point Figure 4 makes with *nephros* and *neuron*. The languages were braided together centuries before anyone tried to teach them apart, so treat the split as a way of making a good first guess, not as a fact about where a word came from.

Where the rule breaks

It is a tendency, not a law, and the sources say so themselves. The *Latin* nomenclature lists *Nephros* (kidney) and *Neuron* (nerve cell) — both Greek — among its general terms, and the official names for the liver and the brain, *hepar* and *encephalon*, are Greek too. Meanwhile Latin words appear in plenty of clinical terms: a *vaginal* discharge, an *oral* examination, a *caudal* approach. Use the rule to make an intelligent first guess at an unfamiliar word, then check it.

08 The species adjectives

This is the part that is specifically veterinary, and it is the reason a human terminology textbook only gets you so far. Every species adjective is a Latin word, and the nomenclature names the animals with the same binomials you meet in the rest of biology.

THE ANIMAL	ITS LATIN NAME IN THE NOMENCLATURE	THE ADJECTIVE YOU WRITE
Dog	<i>Canis familiaris</i> abbreviated ca	canine

THE ANIMAL	ITS LATIN NAME IN THE NOMENCLATURE	THE ADJECTIVE YOU WRITE
Cat	<i>Felis catus</i> abbreviated fe	feline
Horse	<i>Equus caballus</i> abbreviated eq	equine
Cattle	<i>Bos taurus</i> abbreviated bo	bovine
Sheep	<i>Ovis aries</i> abbreviated ov	ovine
Goat	<i>Capra hircus</i> abbreviated cap	caprine
Pig	<i>Sus scrofa domestica</i> abbreviated su	porcine from <i>porcus</i>, not from <i>sus</i> — the adjective and the binomial come from different Latin words for the same animal
Rabbit	<i>Oryctolagus</i> abbreviated or	leporine from <i>lepus</i>, hare

Reading the abbreviations in an atlas entry

Nomenclature entries are annotated with those short species codes — mostly two letters, though the goat is **cap** — and they are easy to miss. When an entry reads “in **bo** it extends caudally”, it is telling you that the detail applies to *Bos taurus* and not to the others. **Car** means carnivores generally, **Ru** ruminants, and **Un** ungulates — restricted, in this book, to pig, sheep, goat, cattle and horse. Those codes are how a single volume covers eight species at once.

09 Decode one you have never seen

The point of all this is that you should not need to be taught a word to read it. Work through these in order and cover the answers.

Worked example: hepatomegaly

Take the suffix first: *–megaly*, enlargement. Then the root: *hepat*, liver. The *o* in the middle is the combining vowel and means nothing. Assembled backwards: **enlargement of the liver**. You were never taught the word; you read it. Now cover the table below and do the same three steps on *nephrectomy*, *arthrocentesis*, *encephalopathy*, *cardiomyopathy* and *dermatosis*. Every part you need is in the tables above — including *my/o*, muscle, from the pairs table.

THE TERM	SPLIT IT	WHAT IT MEANS
nephrectomy	nephr (kidney) + <i>–ectomy</i> (removal) no combining vowel: the suffix already starts with a vowel	Surgical removal of a kidney
arthrocentesis	arthr (joint) + <i>o</i> + <i>–centesis</i> (puncture to draw off fluid)	Tapping a joint to sample or drain the synovial fluid
encephalopathy	encephal (brain) + <i>o</i> + <i>–pathy</i> (disease of)	Disease of the brain, without saying which
cardiomyopathy	cardi (heart) + <i>o</i> + <i>my</i> (muscle) + <i>o</i> + <i>–pathy</i> two roots, so the combining vowel stays between them — rule 3	Disease of the heart muscle itself
dermatosis	dermat (skin) + <i>–osis</i> (abnormal condition)	An abnormal skin condition — and note it is <i>not</i> <i>dermatitis</i> , which would specify inflammation

Do the same with a Latin name and the method changes completely. *Ligamentum collaterale laterale* has nothing to take apart: it is a noun (*ligamentum*, a fibrous band) and two agreeing adjectives (*collaterale*, running alongside; *laterale*, on the outer side). The lateral collateral ligament. Recognising *which* of the two systems you are looking at is the skill; after that each one is straightforward.

10 The traps

Five things that reliably cost marks, and what to do about each.

THE TRAP	WHAT GOES WRONG	THE FIX
-ectomy vs -otomy vs -ostomy	All three involve a knife, and they are not interchangeable in a clinical record	Out (<i>-ectomy</i>), open and close again (<i>-otomy</i>), or make a stoma (<i>-ostomy</i>) — which may be temporary or permanent
Ilium vs ileum	One is a pelvic bone, the other the last part of the small intestine, and they differ by a letter	Ilium is the bone; ileum is the gut. Both take the adjective <i>iliac</i> / <i>ileal</i>
Peroneal vs fibular	Older texts say peroneal; the nomenclature prefers fibular	Write fibular ; recognise <i>peroneus</i> when you meet it in an older atlas
A term that will not break apart	<i>Orthopaedic</i> splits as straight + child, which is not what it means	Not every term decodes literally. Break it down first, then sanity-check the answer against what you know
An eponym — a structure named after a person	<i>Achilles tendon</i> , <i>Peyer's patches</i> . They follow none of the rules on this page, because they are names, not descriptions. The nomenclature deliberately avoids them	Learn the anatomical name and recognise the eponym: the Achilles tendon is the <i>common calcaneal tendon</i>
Assuming a Latin word is Latin	The official Latin nomenclature itself lists <i>Nephros</i> and <i>Neuron</i> — both Greek	The two languages are mixed. Use the rule as a starting bet, not a guarantee

Plurals deserve their own note, because Latin and Greek both form them differently from English and both turn up in the same sentence.

SINGULAR	PLURAL	THE PATTERN
<i>Musculus</i>	<i>Musculi</i>	–us → –i. Abbreviated M. and Mm.
<i>Vena</i>	<i>Venae</i>	–a → –ae
<i>Ligamentum</i>	<i>Ligamenta</i>	–um → –a
<i>Foramen</i>	<i>Foramina</i>	–men → –mina. Not “foramens”
<i>Corpus</i>	<i>Corpora</i>	A regular neuter pattern — but do not read it as “–us becomes –ora”. <i>Musculus</i> still gives <i>musculi</i> . Learn this pair as itself
<i>Ganglion</i>	<i>Ganglia</i>	Greek –on → –a
<i>Diagnosis</i>	<i>Diagnoses</i>	Greek –is → –es

Checkpoint

Cover the tables. What does the combining vowel mean? Why does *gastric* lose its *o* while *gastroenterology* keeps two? What is the plural of *foramen*? Which Latin word gives you the adjective for the pig? If those four came easily, the quiz below is the right next step.

11 Quiz: test yourself

Sixteen questions on the parts, the five rules, the Latin pattern, the species adjectives and the plurals. Cover the answers first.

1. What are the two languages veterinary anatomy terminology is built from? **Answer: Latin and Greek.** As a strong tendency, the **names of structures** are Latin and the words for **disease and procedures** are Greek — but the two are mixed, and the official Latin nomenclature itself contains Greek roots such as *nephros*. 2. Break down *gastroenteritis*. **Answer: gastr** (stomach) + **o** (combining vowel) + **enter** (small intestine)

+ **-itis** (inflammation) = inflammation of the stomach and small intestine. Read the suffix first, then work backwards. 3. Why is it *gastric* and not *gastroic*? **Answer:** Because the suffix **-ic** already begins with a vowel, so the combining vowel is dropped. Keep it when the suffix begins with a consonant — *gastrology*. 4. When do you keep the combining vowel no matter what? **Answer:** **Between two roots.** *Gastr/o/enter/o/logy* keeps the o between *gastr* and *enter* even though *enter* begins with a vowel. 5. In what order are the roots listed in a multi-root term? **Answer:** **Anatomical order** — the order the structures come in the body. *Gastroenterology*, because the stomach comes before the small intestine. 6. What does the combining vowel mean? **Answer:** **Nothing.** It carries no meaning at all; it exists only to make the term pronounceable. That is why dropping it never changes what a term means. 7. What is the difference between **-ectomy**, **-otomy** and **-ostomy**? **Answer:** **-ectomy** removes the structure. **-otomy** cuts into it. **-ostomy** surgically creates an opening, or stoma — and that opening may be temporary or permanent. An ovariectomy removes the ovary; a laparotomy only opens the abdomen and closes it again. 8. Decode *musculus extensor carpi radialis longus*. **Answer:** The **long** (*longus*) **muscle** (*musculus*) on the **radial side** (*radialis*) that **extends** (*extensor*) the **carpus** (*carpi*, genitive — “of the carpus”). Nothing here is built from parts; every word is a whole Latin word. 9. Why is one muscle called *longus* at all? **Answer:** Because there is a *brevis* to distinguish it from. The nomenclature records that the two extensor carpi radialis muscles are **separate in the cat and partially fused in the dog** — so the adjective earns its keep in one species more than the other. 10. What is the plural of *foramen*? **Answer:** **Foramina.** Not “foramens”. The pattern is **-men** → **-mina**. 11. What is the plural of *corpus*? **Answer:** **Corpora** — not *corpi*. It is the irregular one people get wrong most often. 12. Which animal does the adjective *porcine* belong to, and why is that odd? **Answer:** The **pig**. It is odd because the nomenclature calls the pig *Sus scrofa domestica*, while the adjective comes from a different Latin word for the same animal, *porcus*. 13. What do **ca**, **fe**, **eq** and **bo** mean in an atlas entry? **Answer:** They are the nomenclature’s species abbreviations: *Canis familiaris*, *Felis catus*, *Equus caballus* and *Bos taurus*. When an entry says a structure occurs “in bo”, it is telling you the species it applies to. 14. What does **M.** stand for, and what is **Mm.**? **Answer:** *Musculus*, and its plural *musculi*. The same convention gives you **N.** for *nervus*, **A.** for *arteria*, **V.** for *vena* and **Lig.** for *ligamentum*. 15. Does every term break down neatly? **Answer:** No, and expecting it to is the commonest frustration. *Orthopaedic* splits into straight + child. Break the term down first, then check the answer against what you already know. 16. You meet *hepatomegaly* for the first time. What is it? **Answer:** **hepat** (liver) + **o** + **-megaly** (enlargement) = an enlarged liver. You never needed to be taught the word — that is the whole point of learning the parts.

12 Veterinary anatomy terminology — frequently asked questions

Why is veterinary anatomy written in Latin at all?

Because it is nobody’s living language, so it does not drift. A Latin term means the same thing to a vet in Cairo, São Paulo and Helsinki, and the international nomenclature that governs it can be revised deliberately rather than by fashion.

Do I have to learn Latin grammar?

No, but you do need to recognise three jobs: the **head noun**, **adjectives** that agree with it, and **nouns in the genitive** such as *carpi*, meaning “of the”. A second noun may also sit in apposition, renaming the first. That will carry you through most structure names; the harder ones add participles and compounds.

Is Greek only used for disease words?

Mostly, but not exclusively. It is a strong tendency rather than a rule — the official Latin nomenclature itself uses the Greek *nephros* and *neuron*. Treat “Latin names it, Greek describes what went wrong” as a good first bet.

What is the fastest way to learn the word parts?

Test yourself in both directions — part to meaning and meaning to part — and decode unfamiliar terms rather than memorising whole words. Learning twenty roots lets you read hundreds of terms; memorising twenty terms gets you twenty terms.

Are the American and British spellings both acceptable?

Yes, and you will meet both. *Haematology* and *hematology*, *oesophagus* and *esophagus*, *anaemia* and *anemia* are the same words; the American forms drop a vowel. Be consistent within one document.

Where do the directional terms like cranial and dorsal fit in?

They are Latin adjectives from the same system, and they have a guide of their own — see the guide to anatomical planes and directional terms, which covers them and how to read a section.

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