When I use a word... Is it inflammation? It is!

With sixty staring me in the face, I have developed inflammation of the sentence structure and hardening of the paragraphs.

James Thurber

In the first lecture on pathology that I attended as a medical student, the Professor (in the days when professors taught medical students) introduced us to the subject of inflammation. I had naively thought that inflammation was such a basic topic that everything about it must be known. I soon learnt that it was so basic that very little was known.

I have long since lost track of all the modern developments in our understanding of the cellular and autacoid functions involved in inflammation, including all those cytokines and transcription factors, but I expect that there is still much more to be discovered. What I do know is that if a word ends in -itis it must have something to do with inflammation. Or must it?

The second edition of the Oxford English Dictionary contains nearly 400 examples, starting with actinodermatitis, progressing through metropentitonitis and ending with Wagneritis. It runs out of steam at the end and omits such exotic items as xerodermatitis, xiphoiditis and zonulitis. Most of them denote some form of inflammation, with a few exceptions—dabitis (a mnemonic for a type of syllogism), mephitis (a foul stink), ostracitis (an impure zinc ore found incrusting copper furnaces), rhabditis (a nematode worm), samnitis (an unidentified poisonous plant named by Spenser in The Faery Queen) and Vitis (the grapevine genus). Diachalcitis, listed but not defined in OED, appears in Robert Hooper’s edition of Quincy’s Lexicon-Medicum. A New Medical Dictionary (1817), where it is defined as ‘a plaster whose chief ingredient is chalcitis’. Chalcitis (not a headword in Hooper or the OED) was marcasite or iron pyrites. The Daphnitis genus of plants is also missing.

The suffix -itis is the feminine form of the Greek suffix -itis, which turned a noun into an adjective. For example, ἀσφαλτος (asphaltos) meant bitumen, and λίμνη ἀσφαλτίτις (limne asphaltitis), the bituminous lake, was the Dead Sea. Since the word for a disease, νόσος (nosos), was feminine (despite its apparent masculine form), any adjective that described a disease of a part of the body ended in -itis. For example, arthritis [nosos] meant a joint disease (specifically gout) and nephritis [nosos] a kidney disease.

Then, without etymological justification, these words ending in -itis came to be specifically associated with inflammatory diseases, distinguishing them from other types of pathology, which could be given suffixes such as -opathy (compare neuritis and neuropathy) or -osis (compare diverticulitis and diverticulosis, better collectively called diverticular disease, since you never really know which one a patient has). Even if the form did not occur in Greek, you could make it up by adding the suffix -itis to a Greek noun (bronchitis, pneumonitis), or to any other noun for that matter (appendicitis, tonsillitis).

The earliest recorded use of an -itis noun in English is in Bartholomew Traheron’s translation of Johannes de Vigo’s The Most Excellent Works of Chirurgye (1543): ‘Arthritis is when there is weakness in all the joints of the body, a noughty humour flowing to the same.’ But, although ‘arthritis’ was presumably known long before that, since it was used to mean gout by Greek authors such as Hippocrates and Aretaeus, the trend was slow to catch on—there are only about 20 examples of -itis nouns whose first recorded instances are dated before 1800. Then the form exploded—over 100 examples in the first half of the 19th century and nearly 200 in the second half. Since then there have been under 50, although since the last example dates from 1969 (photokeratitis), several must be missing. Indeed the omissions contain some surprises; here is a short list, with the dates of the earliest occurrences that I have found: alveolitis* (1939), crystallitis (1977), epicondylitis* (1951),...
hamartritis (1945), insulitis (1954), onychitis (1953), pseudofoliculitis (1956), rectitis* (1898), staphylitis (1946), syringitis (1971), ten(d)ovaginitis* (1930), xerodermatitis (1992), xiphoiditis (1965); those asterisked are to be found in the text of OED but not as headwords. The latest addition to this list is Wiïitis, an acute tendonitis from playing video games.

But nowadays, -itis has started to be used to signify any abnormality, not necessarily an inflammatory one. For example, ‘transaminitis’ for raised serum transaminase (aminotransferase) activities. This bastardization is not [yet] listed in the Oxford English Dictionary. The first instance in Pubmed dates from 1977 and the second 1984, since when it has appeared regularly, albeit no more than 20 times per year. I have also seen ‘CPKitis’, but only once.

The -itis ending is often used to indicate something with which people are obsessed, for example computeritis, electionitis, jazzitis and sputnikitis, which carry the figurative implication of a social evil or an activity or interest that is regarded as being unhealthy. It is also occasionally used to describe some pseudo-diseases, such as dartitis, a state of anxiety that prevents a player from releasing a dart at the right moment, better known as the yips, and telephonitis, a compulsive desire to make telephone calls. Localitis, according to a 1942 article in Newsweeek, is ‘a military disease…common to those, usually in remote spots, who see their local areas as the axial hub of all strategic movements’; like some institutions I know. Mondayitis is a reluctance to start the working week; I wonder at the absence of Tuesdayitis, Wednesdayitis,.....

This addition of -itis to an ordinary word is an old, often jocular, habit. A contributor to the Gentleman’s Magazine in 1882 coined the phrase ‘acute Americanitis’, defined in the OED as ‘a condition or state of nervous tension and fatigue, perceived particularly to affect Americans as a result of a stressful, hurried lifestyle’. Wagneritis, according to George Bernard Shaw as long ago as 1889, is ‘a disease not uncommon among persons who have discovered the merits of Wagner’s music by reading about it, and among those disciples who know no other music than his’. ‘Wagner’, wrote one such, is the Marat of Music, and Berlioz is its Robespierre’. But J B Morton (‘Beachcomber’) debunkingly pronounced that ‘Wagner is the Puccini of music.’ An insult to both by the sound of it.

Sometimes confusion arises over the spelling of words that properly end in -itus. ‘Pruritus’, for example, is a Latin fourth declension noun, which is why it ends in -us. The symptom may result from inflammation, but it means ‘itch’ and should not be spelled ‘pruritis’, as occurs in 2.7% of all instances listed in Pubmed. The error is not typographical—when it occurs in the title of a paper it also commonly occurs elsewhere. Every paper in which the correct spelling is used in Pubmed is also indexed under ‘pruritis’, presumably to enable those who do not know the correct spelling nevertheless to retrieve all the literature. However, this perpetuates the mistake, and a corrective note (‘Do you mean pruritus?’) would be preferable. This error is an old one—it was recorded in Hooper’s Medical Dictionary of 1799. Even the OED (first and second editions) gets it wrong, in the etymology of ‘anti-pruritic’ and the definition of ‘pseudorabies’. I have also seen other inflammatory misspellings of this sort—‘tinnitis’, ‘decubitis’, ‘detritis’ and ‘vomitis’, for example. ‘Crepitis’ might mean an obsession with a French form of pancake, rather than a creaking sound, properly crepitus.

We sometimes forget that patients do not always understand the words that we consider to be simple and part of everyday discourse. They may not say anything, out of politeness or, more often, fear of appearing stupid. And they may well be misled by proximate causes, or, in the case of words, proximate meanings and derivations. ‘Inflammation’, for example. I recently saw a patient with the so-called typical form of gout, podagra, affecting the big toe. ‘It’s gout, isn’t it, doctor?’ said its owner. He had seen cartoons of red-faced army colonels with their feet swathed in bandages, and perhaps James Gilray’s famous depiction of the gout demon. I confirmed the diagnosis. ‘What is it exactly?’ he asked.

I left out the etymology of the word and the old medical ideas about fluxes and rheumatism, but explained the role of uric acid and the resulting inflammation. He thought about it for a moment. ‘You mean, like it’s on fire?’ ‘Sort of.’ ‘But I haven’t put it anywhere near the fire.’

Jeff Aronson

References