Medical terminology is an important tool for communication among medical practitioners, researchers, and scientists. The precise use of terms ensures a successful orientation in the field of medical practice contributing to the adequate treatment of patients.

The subject of this commentary is the misuse of the terms “osteoarthritis” and “osteoarthrosis” in the specialty of orthopedic surgery. Contemporary literature, journals, media, etc., especially those in English language, are dominated by the use of the term “osteoarthritis” for the most common pathological condition, namely the degenerative joint disease. Leading speakers at prestigious international scientific meetings persistently use the term “osteoarthritis”. “Osteoarthritis” is derived from the Greek word part osteo-, meaning “bone”, combined with arthritis: arthr-, meaning “joint”, and –itis. Strictly taken, this application is incorrect. Because the suffix “-itis” implies the presence of inflammation. Therefore, “osteoarthritis” should be considered misleading since inflammation is not a primary feature of the degenerative joint disease. Here the mechanical stress, avascular necrosis, posttraumatic sequelae, metabolic causes, etc. are the etiopathophysiological factors leading to the process of joint cartilage “tear and wear” (degeneration, noninflammatory breakdown). The term “ostearthrosis” is correct for degenerative joint disease. Inflammation may play only a secondary or concomitant role in this condition. This is in contrast to rheumatoid arthritis, which is primarily an inflammatory pathologic entity. In short, “ostearthritis” means inflammation of the joint, while “osteoarthritis” means degeneration of the joint.

Unfortunately, this terminological misuse and embarrassment in the Anglo-Saxon literature and practice is nourished by some famous medical dictionaries with multiple editions (Dorland’s Illustrated Medical Dictionary, Stedman’s Medical Dictionary, Stedman’s Medical Terminology, etc). [1,2,3] In general, the reader may find the following terms and explanations:

- osteoarthritis - “noninflammatory degenerative joint disease… characterized by degeneration of the articular cartilage, hypertrophy of the bone at the margins, and changes in the synovial membrane…”

- ostearthrosis – “chronic arthritis of noninflammatory character”

- ostearthrosis – “inflammation of bone and joint”, but also “osteoarthritis is another name for the chronic condition known as ostearthrosis”
In the 19th century and the first half of the 20th century the practice and theory of European orthopedics were strongly influenced by the French and German textbooks where the denomination “arthrosis deformans” (from Greek/Latin) was predominantly used. This term is still in use in most European countries. However, in the second half of the 20th century, when world medicine came under the strong influence of the Anglo-Saxon literature and science, “osteoarthritis” became the preferred word used for degenerative joint disease.

In fact, osteoarthritis (in English literature “osteoarthritis”) is a degenerative joint disease but may have different origin. The most important point here is what is the primum movens for this variety of pathological conditions. Although primary (idiopathic) osteoarthritis occurs, the majority of osteoarthrosis types are of secondary nature, e.g. following DDH, intraarticular fractures or cartilage injuries, static disorders, sports overloading, state after femoral head osteonecrosis, metabolic and endocrine disorders, etc. All these are non-inflammatory conditions. The most important pathophysiological factor for degeneration of the joint is the mechanical stress leading to progressive cartilage wear and damage.

Precise terminology is very important, especially in medical practice, where it is directly related to diagnostics and treatment, and consequently to clinical results and outcomes. In fact, some English-speaking surgeons demonstrate some readiness for change. However, the majority remain stubborn explaining the wrong use of term as a bad habit, tradition, disposition, inertia... Bad habits should be subjected to correction. Although the Anglo-Saxon literature is very influential, it is time for repentance, namely a correct use of terms.

Meanwhile, the English-speaking authors started using “OA” for noninflammatory joint diseases. The acronym OA seems to be a “salvage” solution of the existing terminological disturbance. But who can tell what hides behind OA? Probably, it makes things more comfortable and less negligent, but it does not correct the terminological cast of mind. I believe it will only change if we all keep repeating what is correct and what is incorrect. A thought-provoking discussion would be also very useful.

References:
3. Stedman’s Medical Terminology: Steps to Success in Medical Language. Williams & Wilkins, 2010