



Editorial: From the athlete foot to the painful hip: applied anatomy and clinical relevance of anatomical specific features in lower limb pathologies

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In this last 2019 issue, we have collected several articles dealing with the lower limb anatomy, its depiction on medical imaging, and the clinical relevance of these anatomical aspects.

Anatomical variations are commonly placed at the end of the journal issues, but we proposed to consider them at first: the painful foot in athletes can reveal unusual patterns, about tendons but also about bones and joints, and the knowledge of such variants conditions get a huge importance for avoiding misdiagnoses. Bony variations of the posterior talar tubercles have most often been studied in sports population, but such anatomical features are here presented in non-athletic but symptomatic patients. The posterior pain or discomfort of the ankle lead to difficult diagnosis of the etiology, and the posterior intermalleolar ligament needs to be assessed. All around the ankle joint, a certain amount of fluid in the tendon sheath is currently considered as abnormal, but may also be a normal finding, and the MRI aspects in healthy volunteers will be helpful for determining pathological conditions.

The venous pathologies of the lower limb can cause painful situations, but not related to osteoarticular nor muscular pathologies, and the small saphenous vein has been revisited. The knee surgical practice imposes to know precise arthroscopic landmarks for guiding the surgical techniques. These procedures need also anesthetic blockade for an easy performing, and the innervation of the knee capsule is of

paramount importance in the field. Regarding the risk of iatrogenic arterial injuries, the variations of the distal portion of the popliteal artery need to be known for ensuring a safety surgical practice. For any repair and fixation of the patella, the depiction of its bony structure through MRI with 3D-reconstruction is of great interest. In addition, a patellar calcar is currently showed by routine MRI and must be known by radiologists and clinicians. The curvature of the femur has already been studied, but this morphological aspect is interestingly completed with the assessment of the bone density. At the level of the hip, two points are developed: one aspect is morphologic: the iliocapsularis muscle, studied on fetuses; the second one is more functional and dynamic and deals with the bony landmarks of the acetabulum during hip abduction.

Finally, musculo-skeletal aspects of the pelvis have been depicted through the anatomy of the coccyx on multidetector-computed-tomography, and about a rare possibility of muscular degenerative pathology of the piriformis muscle.

We wish you will find a very exciting reading in this issue.

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