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Editorial

# Ultrasound in Rheumatology, It is a Must

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The use of Musculoskeletal Ultrasound (MSKUS) has been expanding rapidly recently in the specialty of rheumatology, since it was introduced over 20 years ago. Nowadays, rheumatologists are becoming increasingly interested in MSKUS. The number of articles related to MSKUS published in rheumatology journals is growing fast. MSKUS has become one of the most appreciated tools in rheumatology, not only in Europe where it was adopted earlier and has become a part of the rheumatologists' identity, but also in the USA, where there has been a growing interest for the use of this bed-side tool yielding another life. Actually, more national and international rheumatology associations and societies are offering training programs on MSKUS skills all year around, such as the Spanish school of Ultrasound (EcoSER), the EuropeanLeague against Rheumatism (EULAR), the American College of Rheumatology (ACR).[1,2]

As a part of their training, rheumatologists are taught the correct standardization of the examination of different joints and the recognition of both normal and pathological findings. However, clinicians often need to know beyond the findings on physical exam, and also what is going on with the patient overall clinically. Rheumatologists, similar to other clinicians, need to find answers to questions such as what is the the patient diagnosis and how active the disease is. Recent publications support the idea that ultrasound has the potential to improve the diagnostic accuracy and the clinical evaluation of patients with inflammatory conditions, autoimmune diseases or large vessel vasculitis among others.[3] When used appropriately and after an initial steep learning curve, ultrasound may change conventional clinical practices; in the near future, patients with rheumatic diseases will be diagnosed and treated individually with greater precision and effectiveness leading possibly to an improvement in health care standards. The question is whether we are faced with a mere wishful thinking of a small group of experts, or that the role of MSKUS is well appreciated and highly esteemed among rheumatologists. The answer to this question is probably relevant, given that it could impact the health care model and training programs.

Classically, MSKUS in rheumatology focused on joints and tendons not only for early diagnosis, but also for monitoring disease activity such as rheumatoid arthritis, psoriatic arthritis and spondiloartrhropaties.[2] There has been an expanding interest lately in rheumatology in the use of US such as fast track clinics for large vessel vasculitis,[4] evaluation soft tissue masses, the diagnosis of primary Sjögren's syndrome[5] among others.

During the last 20 years, the Spanish Society of Rheumatology (SER) has developed a systematic training program on ultrasound and this technique has been extended and implemented throughout the country. In fact, more than 1500 rheumatologists have received training through an educational program composed of 4 levels (basic, introductory, intermediate, advanced). According to a recent national survey, we know that 90% of rheumatology departments in Spain have an ultrasound machine and 38.7% of rheumatologists use this technique. In this sense, Spain could be a good model to understand how ultrasound is perceived in clinical practice, and how it is used in the decision-making process.[6]

In Spain, the Catalan Society of Rheumatology constituted an US working group (EcoCAT) almost 10 years ago, which was joined by more than 60 rheumatologists. In addition, all hospitals from this Eastern autonomous region in the state have at least one high resolution US machine for their daily clinical practice per center.

In the present issue of the journal we describe the use of ultrasound beyond joints and tendons, such as lung US for the diagnosis of ILD, the use of US in the diagnosis of crystal deposition diseases, the use in pediatrics, or soft tissue masses (parotid and submandibular gland). We have left aside indications like trauma and diagnosis of Achilles tendon injuries,[6] or new software options such as elastography, which is emerging as an essential improvement in the diagnosis, but may need a separate issue to put some light on it.[7]

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The present journal issue is a large collaboration among different rheumatology specialists, the majority of the members of the study group for ultrasound of the Catalan society of rheumatology (EcoCAT), who are increasingly interested in clinical research for new applications of US in Rheumatology and autoimmune diseases.

We are delighted to launch this multicenter US publication between different specialties and hospitals, hopping that it will be valuable to the readers. For those who already work in their daily practice performing sonography this will be a confirmation that the technique was more than just another diagnostic tool option. For those who haven't yet started, we as editors of this interesting practical papers and after more than 20 years of experience, and scanning hundreds of joints, tendons, ligaments we can only certify that *US it is a must.*

Time will give us the reason and we are sure that newcomers won´t regret in the near future have been entirely absorbed by this diagnostic option.

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