

organises training courses every two years at Genova and supplies continuous training through the EULAR imaging library.

Results: The following projects resulted in publications: As standardisation of techniques to evaluate the microcirculation is one of the aims of the study group, a first activity was a multi-centre study to assess the reliability of simple capillaroscopic definitions to evaluate morphologies of single capillaries.¹ Optimisation of reliability of initial definitions has been obtained at the 7th EULAR course on capillaroscopy.² Secondly, the evaluation of interrater reliability of microcirculatory flow evaluation by LASCA was piloted by 2 of the founding members and has been published.³ Thirdly, a cross-sectional, international SURvey on non-iNvaSive techNiques to assess which tools are being used to evaluate the microcirculation in patients with Raynaud's phenomenon has been performed in between 471 eligible physicians.⁴ A 4th publication resulted from a systematic review, analysing the role of capillaroscopy in systemic lupus erythematosus, based on standard interpretation of capillaroscopy according to the EULAR SG MC/RD.⁵

Conclusions: The relatively young EULAR SG MC/RD is thriving well, based on multi-centre joint forces to achieve standardisation of microcirculatory evaluation of rheumatic diseases as well as in achieving clinical as well as basic science research.⁶

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FRIDAY, 15 JUNE 2018

Laboratory course – from the clinic to the lab and back

SP0113 NEW TRENDS IN BIOMARKERS IN INFLAMMATORY JOINT DISEASE

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This lecture provides an overview on new developments in biomarker research and standardisation in inflammatory joint diseases. The presentation includes an introduction of established and new biomarkers in serum and synovial fluid as well as methods for their detection. Furthermore, an overview on different modifications of auto-antigens (including citrullinated and carbamylated isoforms) and their role in immune response and pathogenesis of disease will be given. The diagnostic performance of new and established biomarkers will be discussed including antibodies against modified antigens also illustrated by difficult to diagnose cases. In this context, special attention will be attributed to the predictive value of biomarkers for diagnosis of disease and treatment response.

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New assessments in clinical practice

SP0114 HOW TO PERFORM A QUICK AND RELIABLE PHYSICAL EXAMINATION IN RHEUMATOLOGY

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The GALs (Gait, Arms, Legs, Spine) screen is a quick, reasonably sensitive way to detect common musculoskeletal (MSK) abnormalities as part of a wider medical assessment.¹ However, for someone with MSK complaints a detailed assessment is required to determine the diagnosis and impact of the condition on that person. The history is the key starting point. This needs to be holistic and individualised as the enquiry proceeds, since the impact of any condition is person-specific and influenced by many factors (e.g. psychosocial, illness perceptions, sleep, comorbidity etc.). A thorough history usually suggests the single most likely cause for the patient's problem(s) and should then guide the examination – an efficient

targeted “rapier” approach where the practitioner selects appropriate skills from a range of competencies according to specific history elements. This contrasts with a longer hypothesis-free “screen” where an identical set of procedures is undertaken in each patient.

This presentation covers key principles and considerations of assessment and illustrates how the history guides the subsequent “rapier” examination.² Examples include:

(1) in the *history*: determination of pain localisation and features associated with radiated pain; pain and stiffness characteristics that differentiate mechanical usage-related pain, inflammatory pain, acute crystal synovitis, destructive bone pain and neurogenic pain; non-specific symptoms of inflammation.

(2) in the *examination*: usual order of inspection at rest, inspection during movement, then palpation at rest and during movement of symptomatic regions; contrasting clinical findings that quickly differentiate joint and peri-articular problems; initial selection of the movement(s) that is affected first and most severely by arthritis – the tight pack position(s); detection of “stress pain” (pain worse in tight-pack but reduced/absent in loose-pack positions – the most sensitive sign of inflammation); examination for effusion, soft-tissue and firm swelling; use of resisted active movements and stress tests for peri-articular lesions; a targeted screen for asymptomatic disease prompted by the main diagnosis.

EULAR learning resources available at http://www.eular.org/edu_training_dvd.cfm include:¹ The “GALS” screen and² Principles of the musculoskeletal history and examination.

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SP0115 VALUE OF INFLAMMATORY BIOMARKERS IN CLINICAL DECISION MAKING

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Inflammation is known to play a major role in rheumatologic disorders. Inflammatory biomarkers can help clinicians diagnose rheumatic diseases and assess disease activity more accurately. These markers have been incorporated into classification criteria of several diseases to enable early diagnosis and timely initiation of treatment. Quantification of inflammation has become essential to tailor the treatment strategy, especially in patients with rheumatoid arthritis, polymyalgia rheumatica and vasculitides. Inflammation can be measured from different perspectives – the measures that quantify biomarkers participating in inflammation, surrogate markers of inflammation, and the by-products of the inflammation process.

Erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels are among the most commonly used acute phase reactants in the detection and follow-up of rheumatologic disorders. These markers are not specific to trigger factors of inflammation, limiting their capacity to discriminate the cause for stimuli as well as the organs involved.

In the current presentation the advantages and limitations of new and established inflammatory biomarkers in clinical decision making will be discussed illustrated by case reports.

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SP0116 VALUE OF ULTRASOUND IN CLINICAL DECISION MAKING

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The use of ultrasound (US) has increased over the past 20 years for clinical decision making and for optimised patient care. The utility of US for correctly diagnosing the cause of musculoskeletal symptoms is known by many clinicians but little published data exist in this area. However, the value of US for diagnosing and handling treatment decisions especially in patients with rheumatoid arthritis (RA) has been well documented. US has been proven to be more sensitive than clinical joint evaluation.^{1,2} This has resulted in the acknowledgement of US as an addition to the clinical joint evaluation in suspected RA patients for assessing a more elaborate joint involvement helping the clinician to correctly classify the patients according to the new RA classification criteria.³ Likewise, in early undifferentiated inflammatory arthritis the use of US may assist in pinpointing those patients who will develop persistent inflammatory arthritis over time.⁴ US may also impact diagnosis and treatment decisions. This has been shown both in situations with regional pain such as the painful foot in chronic inflammatory diseases and the possible need for corticosteroid injections but also in global disease activity assessment in RA patients where US provides additional disease activity information leading to altered treatment decisions as compared to regularly DAS28 assessment.^{5,6} Also, in remission US may – by assessing subclinical inflammation