242 Friday, 14 June 2019 Scientific Abstracts

respondents with RA and 1 in 3 AJIA who had either clinical levels or a formal diagnosis of anxiety or depression had never received any psychological support. **Conclusion:** This survey indicates that despite meeting the criteria for anxiety or depression a majority of people with RA and AJIA have not been formally diagnosed with a mental health condition and many are not receiving the support they should. It is therefore an imperative for rheumatology services to routinely measure anxiety and depression in order to intervene before the individual is in crisis. Acting early by sign-posting and referring on to specialist services has the potential to improve a person's physical and psychological well-being.

REFERENCES

- Packham JC, Hall MA, Pimm TJ. Long-term follow-up of 246 adults with juvenile idiopathic arthritis: predictive factors for mood and pain. Rheumatology 2002; 41(12):1444-1449.
- [2] Covic T, Cumming SR, Pallant JF, Manolios N, Emery P, Conaghan PG et al. Depression and anxiety in patients with rheumatoid arthritis: prevalence rates based on a comparison of the Depression, Anxiety and Stress Scale (DASS) and the hospital, Anxiety and Depression Scale (HADS). BMC Psychiatry 2012; 12(1):6.
- [3] National Institute for Health and Care Excellence. Rheumatoid arthritis in adults: management NG100. 2018. London, NICE.
- [4] Luqmani R, Hennell S, Estrach C, Birrell F, Bosworth A, Davenport G et al. British Society for Rheumatology and British Health Professionals in Rheumatology guideline for the management of rheumatoid arthritis (the first two years). Rheumatology 2006; 45(9):1167-1169.
- [5] Luqmani R, Hennell S, Estrach C, Basher D, Birrell F, Bosworth A et al. British Society for Rheumatology and British Health Professionals in Rheumatology guideline for the management of rheumatoid arthritis (after the first 2 years). Rheumatology 2009; 48(4):436-439.
- [6] Dures E, Almeida C, Caesley J, Peterson A, Ambler N, Morris M et al. A survey of psychological support provision for people with inflammatory arthritis in secondary care in England. Musculoskeletal Care 2014; 12 (3):173-181.
- [7] Zigmond AS, Snaith RP. The hospital anxiety and depression scale. Acta Psychiatrica Scandinavica 1983; 67(6):361-370.

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New assessments in clinical practice

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DIAGNOSTIC ACCURACY OF ULTRASOUND IN CALCIUM PYROPHOSPHATE DEPOSITION DISEASE: PRELIMINARY RESULTS OF THE OMERACT US IN CPPD SUB-GROUP

Georgios Filippou¹, Anna Scanu², Antonella Adinolfi³, Carmela Toscano³, Raquel Largo-Carazo⁴, Esperanza Naredo⁴, Emilio Calvo⁴, Gabriel Herrero-Beaumont⁴, Pascal Zufferey⁵, Christel Madelaine-Bonjour⁵, Daryl Maccarter⁶, Stanley Makman⁶, Zachary Weber⁶, Ingrid Möller⁷, Marwin Gutierrez⁸ Carlos Pineda⁸, Denise Clavijo Cornejo⁸, Héctor García⁸, Victor Ilizaliturri⁸, Jaime Mendoza Torres⁸, Raul Pichardo⁸, Luis Carlos Rodriguez Delgado⁸, Emilio Filippucci⁹, Edoardo Cipolletta⁹, Teodora Serban¹⁰, Florentin Ananu Vreju¹¹, Gael Mouterde¹², Maria-Antonietta D'agostino¹³, Marcello Govoni¹, Leonardo Punzi¹⁴, Nemanja Damjanov¹⁵, Lene Terslev¹⁶, Irene Azzolin¹⁷, Giulio Guerrini¹, Carlo Alberto Scirè¹, Annamaria Iagnocco¹⁷. ¹University of Ferrara, Ferrara, Italy; ²University of Padua, Padua, Italy; ³University of Siena, Siena, Italy; ⁴Hospital Fundación Jiménez Díaz, Madrid, Spain; ⁵rhu/dal/chuv, Lausanne, Switzerland; ⁶North Valley Hospital, Whitefish, Montana, United States of America; ⁷Instituto Poal, Barcelona, Spain; ⁸Instituto Nacional de Rehabilitacion, Mexico City, Mexico; 9Università Politecnica delle Marche, Jesi, Italy; 10ASL3 -Azienda Sanitaria Genovese, Genova, Italy, 11 University of Medicine and Pharmacy, Craiova, Romania; 12 Lapeyronie hospital, Montpellier, France; 13 APHP Hôpital Ambroise Paré, Boulogne-Billancourt, Paris, France; 14 Venice Hospital, Venice, Italy; 15 University of Belgrade, Belgrade, Serbia; 16 Center for Rheumatology and Spine Diseases, Rigshospitalet, Copenhagen, Denmark; ¹⁷Università degli Studi di Torino, Turin, Italy

Background: 9The OMERACT Ultrasound (US) in calcium pyrophosphate deposition disease (CPPD) sub-task force has been working on the assessment of the

utility of US in CPPD since 2014 first creating definitions for CPPD identification and then demonstrating that US is a reliable tool[1].

Objectives: Objective of this study is to assess the diagnostic accuracy of US in CPPD

Methods: This is a multicentre international diagnostic accuracy study involving 17 centres from 9 countries. We enrolled in this study consecutive patients waiting to undergo knee replacement surgery due to severe osteoarthritis. Each patient underwent US examination of the knee, focusing on the menisci and the hyaline cartilage, the day prior to surgery, scoring each site according to the presence/absence of CPP as defined by OMERACT[1]. After surgery, the menisci and the condyles were collected and examined microscopically. Six samples were collected, both from the surface and from the internal part of menisci and cartilage trying to cover a large part of the structure. All slides were observed under transmitted light microscopy and by compensated polarised microscopy. A dichotomous score was given for the presence/absence of CPP crystals. US and microscopic analysis were performed by blinded operators. Sensitivity and specificity of US were calculated using microscopic findings of the menisci and cartilage as the gold standard.

		95% Confidence	Interval]
	409	239	
Prevalence	408	238	59.4%
Sensitivity	83.3%	51.6%	97.9%
Specificity	61.18	35.7%	82.7%
ROC area	.722	.562	.882
Likelihood ratio (+)	2.14	1.14	4.03
Likelihood ratio (-)	.273	.073	1.02
Odds ratio	7.86	1.42	41.2
Positive predictive value	58.8%	32.9%	81.6%
Negative predictive value	84.6%	54.6%	98.1%

Results: These preliminary analyses include 30 patients. The mean age was 71yrs (SD±9.1), 19 (63%) were females. 17 patients were positive at US analysis and 12 at microscopic analysis. Diagnostic accuracy results of US at patient level, are presented in figure 1.

Conclusion: These preliminary results demonstrate that US is a sensitive exam for identification of CPPD with acceptable specificity. US is the first diagnostic technique with consistent reliability and validity to be applied for non-invasive screening for CPPD in clinical practice.

REFERENCES:

[1] Filippou G, Scirè CA, Adinolfi A, et al. Identification of calcium pyrophosphate deposition disease (CPPD) by ultrasound: reliability of the OMER-ACT definitions in an extended set of joints—an international multiobserver study by the OMERACT Calcium Pyrophosphate Deposition Disease Ultrasound Subtask Force. Ann Rheum Dis 2018;:annrheumdis-2017-212542. doi:10.1136/annrheumdis-2017-212542

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