

baseline]. In comparison with baseline the change in the Solomon's score did not reach the statistical significance [10.68 (95%CI 8.78–12.58); p=0.66]. In 38 (39.2%) patients that achieved persistent CDAI remission/low disease activity during the entire 5 years follow-up we observed a statistically significant reduction in the Cuore project score [4.1 (95%CI 2.1–6) vs 3.8 (95%CI 2.3–5.3); p=0.02] and in the Solomon's score [9.3 (95%CI 5.6–13) vs 7.8 (95%CI 5.2–10.5); p=0.04]. No statistical significance was found in CV risk scores stratifying patients for disease duration, RA specific disease characteristics, and mechanism of action and/or number of switch in bDMARD treatment.

Conclusions: RA patients are at moderate/high CV risk as assess by the different CV risk scores used, more consistent if inflammatory or disease specific items are considered in the score. Sustained CDAI remission obtained with bDMARDs can invert CV risk progression for 5 years estimated by Cuore project and Solomon's score, despite ageing.

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THU0154 A PROGRAM FOR SCREENING AND TREATMENT OF CARDIOVASCULAR RISK FACTORS IN PATIENTS WITH CHRONIC ARTHRITIS: 2-YEAR RESULTS

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Objectives: Assess the efficacy of a program for the screening and management of cardiovascular risk factors (CVRF) in patients with chronic arthritis at 2 year follow-up.

Methods: Longitudinal and prospective study of patients included in a program aimed at the screening and improvement of the management of CVRF. Patients diagnosed with rheumatoid arthritis (RA), spondyloarthritis (SpA) and psoriatic arthritis (PsA) were included in the program. In the baseline and follow-up visits, CVRF were recorded, as was their treatment and whether treatment targets were achieved. SCORE index was calculated and modified according to EULAR 2010 recommendations. Tailored education was performed by the nurse and (if needed) referral to the rheumatologist or GP was performed for CVRF drug treatment. For this analysis, we selected patients who completed baseline assessment and the 2 year follow-up. Prevalence and degree of control of CVRF were compared at both time points.

Results: Out of a total of 416 patients included in the program, 123 have completed both the baseline visit and the 2 year follow-up: 79 (64%) women with a mean age of 59.3±10 years. Patients with RA (n=85), SpA (n=14) and PsA (n=24) were included.

	BASELINE		2 YEAR FOLLOW UP	
	N (%)	Poor control N (%)	N (%)	Poor control N (%)
DM	14 (11%)	4 (3%)	14 (11%)	4 (3%)
Hypertension	77 (63%)	54 (44%)	84 (68%)	42 (34%)
Hypercholesterolemia (CT>220 mg/dL)	66 (54%)	37 (31%)	83 (67%)*	20 (16%)*
Smoker	28 (23%)	—	20 (16%)	—
Obesity (BMI>30)	47 (38%)	—	45 (37%)	—
CV events	6 (5%)	—	6 (5%)	—

*p<0.05 comparison baseline – 2 year follow-up

The mean modified SCORE index was 4.6±4 at baseline and 4.6±4 at follow-up. Risk stratification (according to European guidelines) was 73 patients with intermediate risk, 20 with high risk and 20 with very high risk. Meanwhile, at 2 year follow-up, 74 patients showed an intermediate risk, 25 a high risk and 19 a very high risk.

Conclusions: A specific program aimed at detecting CVRF increases the proportion of patients with a CVRF diagnosis. However, it is also associated with an

increase rate of well-controlled hypercholesterolemic patients, with a trend observed in hypertensive patients and smokers. In case the improvement in CVRF control is confirmed, programs such as this could improve the CV prognosis of patients with chronic arthritis.

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THU0155 CUSTOMISED CONSTRUCTION OF DEVICES AS INTEGRATION OF OCCUPATIONAL THERAPY INTERVENTION IN RHEUMATOLOGY BY 3D PRINTING TECHNOLOGY AND CO-DESIGN: FURTHER DEVELOPMENT AND VERIFICATION OF LONG-TERM EFFECTIVENESS

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Background: In our previous study¹ we have analysed the potentiality to create customised personalised aids through the 3D printing technique for patients with chronic physically and psycho-socially progressively disabling rheumatic diseases. It has been shown that the active involvement of the patient in the aid prototyping process through co-design sessions allows a greater acceptance of the aid itself in daily activities.

Objectives: To confirm the effectiveness of custom co-designed aids made with 3D printing technique. To check long-term patient's satisfaction in their daily use. To demonstrate that a client-centred intervention leads to aids greater acceptance, reduces social stigma and improves self-esteem.

Methods: 9 patients affected by long term rheumatoid arthritis were enrolled overall. They expressed their specific needs regarding the aid devices and therefore subsequent meetings were organised that have allowed us to produce and deliver customised objects.

Tools: Autodesk Fusion360 and Dassault Systemes SolidWorks for object modelling; Ultimaker Care for slicing; 3D printing DeltaWASP 20 40

Following a co-design approach, 6 aid devices were customised: hand grip holder for chalk, tablespoon, aid to open the moka coffee machine (2 different models), cans opener, zip puller. For the collection of the design features the product analysis of the USERfit tool was used. The psycho-social impact assessment of the assistance by PIADS (Psychosocial Impact of Assistive Devices Scale) and the patient's satisfaction by QUEST (Quebec User Evaluation of Satisfaction with Technical Aids, scale 1–5) were analysed after 1 week and after 1 year

Results: After 1 year all co-designed aids are still in use and the patients' satisfaction remains unchanged. The psychosocial assessment of delivered aid devices, collected through PIADS (– scale –3+3), showed an overall positive outcome (mean competence +1.92; adaptability:+1.590; self-esteem:+1.70). The assessment of patient satisfaction through QUEST, was good (scale 1–5: satisfaction aid: 4.65; service satisfaction: 4.9). There are no significant changes between scores after 1 week and 1 year except for a reduction in the self-esteem score (p=0.006)

Conclusions: This work shows that an interactive co-design, made possible by 3D printing, allows patients with long-established strategies in the activities of daily life to change habits, satisfactorily. The decrease of self-esteem scores could be probably due to a lower patient's emotional involvement with respect to an object that has become a regular part of his life.

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THU0156 DEPRESSION AMELIORATED BY ORTHOPAEDIC SURGICAL INTERVENTION IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Depression is the most frequently seen comorbidity in the patients with rheumatoid arthritis (RA) ¹. Inflammatory mediators, including TNF-α,