FRIDAY, 14 JUNE 2019

Reproductive issues in rheumatology

OP0326

DEVELOPMENT OF A STANDARDIZED MINIMAL CORE DATA SET FOR PREGNANCY REGISTERS IN RHEUMATOLOGY – RESULTS OF A EULAR TASK FORCE

Yvette Meißner[1], Rebecca Fischer-Betz[2], Laura Andreoli[3], Nathalie Costedoat-Chalumeau[4,5], Diederik De Cock[6], Radboud Dolhain[7], Frauke Förger[8,9], Doreen Goll[10], Anna Moltó[5,11], Rebecca Özdemir[12], Luigi Raio[8,9], Catherine Nelson-Piercy[13], Sebastian C Rodriguez-García[14], Savino Sciascia[15], Marianne Wallenius[16], Astrid Zbinden[8], Angela Zink[1,17], Anja Strangfeld[1]. *[1]German Rheumatism Research Centre, Berlin, Germany; [2]Heinrich-Heine University and Hiller Research Unit, Düsseldorf, Germany; [3]University of Brescia, Brescia, Italy; [4]Université Paris-Descartes, Paris, France; [5]Hopital Cochin, Paris, France; [6]KU Leuven, Leuven, Belgium; [7]Erasmus University Medical Center, Rotterdam, Netherlands; [8]University Hospital, Bern, Switzerland; [9]University of Bern, Bern, Switzerland; [10]Patient partner, Berlin, Germany; [11]INSERM Unit 1153, CRESS, Paris, France; [12]Patient partner, Duisburg, Germany; [13]St. Thomas Hospital, London, United Kingdom; [14]Hospital Clínic Barcelona, Barcelona, Spain; [15]University di Torino, Torino, Italy; [16]University Hospital and Norwegian University of Science and Technology, Trondheim, Norway; [17]Charité University Medicine, Berlin, Germany*

Background: Results from individual data collections on drug safety during pregnancy and outcomes of pregnancy in patients with inflammatory rheumatic diseases (IRD) are often limited due to small number of cases. Joint data analyses from different data sources could solve this problem.
Objectives: The aim of this EULAR task force was to define a core data set to facilitate joint analysis of pregnancy registers in rheumatology.
Methods: Scope and core areas of the core data set have been developed according to COS-STAD recommendations[1] by consensus. An initial list of data items possibly relevant for pregnancy registers was generated based on (I) a systematic literature search, (II) data items already collected by European pregnancy registers and (III) a survey amongst patient representatives. Consensus about the importance of each data item to be included in a core data set was reached by applying a 2-round Delphi survey where each item was rated on a numeric scale (1-3 = low importance, 4-6 = important but not critical, 7-9 = critical importance). Any data item that was considered as 'critical important' by at least 70% of responders in Delphi round 2 was included in the core set. During a face-to-face meeting of the EULAR task force, the inclusion or exclusion of data items with no consensus was finally decided.
Results: The scope was defined as follows: 'To develop a standardized core data set for data collection in prospective observational research and clinical care of pregnant women with IRD including the neonatal phase. All interventions the women receive will be covered. Patients should be enrolled at the earliest possible moment during pregnancy, and data should ideally be collected once every trimester. An additional visit should capture the neonatal phase'. Three core areas were described: 'Maternal information' (including demographics, IRD disease characteristics and comorbidities), 'Pregnancy' (including prior and current pregnancy(ies), delivery and neonatal outcomes) and 'Treatment' (including medication of IRD and other health conditions).
64 experts from 14 different European countries participated in the 2 rounds of Delphi (68% female; 84% physicians, 5% obstetricians, 5% epidemiologists, 3% patients, 3% midwives). Of the 148 data items, 85 were included in the final core set. The figure shows included items within the core areas.

Suggestion of items for a core data set for pregnancy registers in rheumatology

MATERNAL INFORMATION	PREGNANCY	TREATMENT
Demographics	**Prev. pregnancy(ies)**	**Treatment 12 months prior to conception**
Maternal age at conception	Number of prev. pregnancies (gravidity) and parity	DMARD use
Maternal body weight and height	Prev. pre-eclampsia, eclampsia or HELLP syndrome	Oral glucocorticoid use
Maternal educational level and professional training	Number of prev. pregnancy losses (including spontaneous abortion, fetal death and stillbirth)	Use of potentially teratogenic medication
Smoking and alcohol consumption during pregnancy	Prev. preterm birth(s)	
	Prev. neonatal death(s)	
	Congenital malformations of prev. born infant(s)	
IRD disease characteristics	**Current pregnancy**	**Treatment of IRD during pregnancy**
Diagnosis	Planned pregnancy	DMARD use with name, dose and application
Fulfilment of classification criteria	Use of assisted reproduction	interval, start and stop dates and reasons for
Disease duration	Estimated date of conception	stopping
Prior important IRD manifestations*	indication of singleton or multiple pregnancy	Oral glucocorticoid use with dose and application
Physician reported disease severity	Comorbidities: arterial hypertension, gestational	interval, start and stop dates
Disease activity estimated with appropriate score*	diabetes and thromboembolic events	intraarticular glucocorticoid use with application
Physician reported disease activity	Pre-eclampsia, eclampsia or HELLP syndrome	date
Flares during pregnancy	intrauterine growth restriction	NSAID use with application date
Patient reported disease activity		
Patient reported global health		
Disease-specific auto-antibodies and activity markers*		
C-reactive protein (CRP)		
Comorbidities and adverse events	**Delivery/Outcome**	**Treatment of other health conditions during pregnancy**
Selected comorbidities: Antiphospholipid syndrome, Diabetes mellitus, Hypertension, Renal disease, thromboembolic event	Live birth	Use of folic acid, antihypertensive drugs, aspirin, heparin or other anticoagulants
Maternal serious adverse event(s)	Elective termination with reasons and WGA	
Maternal death with date and cause of death	Fetal loss with WGA	
	Gestational age at birth	
	Mode of delivery	
	Preterm premature rupture of membranes	
	Neonatal outcome	
	Birth weight	
	Gender	
	Breastfeeding	
	Congenital malformations, congenital heart block	
	Chromosome abnormalities	
	Hospital admission	
	Neonatal death	

Abbreviations: DMARD, disease-modifying anti-rheumatic drugs; IRD, inflammatory rheumatic disease; NSAID, non-steroidal anti-inflammatory drug; prev., previous; WGA, week gestational age
** The EULAR task force will find additional consensus on disease specific auto-antibodies and markers indicating activity, level of severity or inflammation of the disease (e.g. complement components in SLE patients)*

Conclusion: The consensus process resulted in an extensive list of data items recommended by experts to be collected as a minimum by pregnancy registers in rheumatology. This core data set applies to all pregnant women irrespective of the underlying IRD. The EULAR task force plans to find consensus on additional disease specific advice.

REFERENCE:
[1] Kirkham et. al. PLoS med.2017;14(11):e1002447.

Acknowledgement: This work was supported by a research grant from FOREUM Foundation for Research in Rheumatology.
Disclosure of Interests: Yvette Meißner Speakers bureau: Pfizer, Rebecca Fischer-Betz Grant/research support from: GlaxoSmithKline and UCB Pharma for performing the LuLa-study., Laura Andreoli: None declared, Nathalie Costedoat-Chalumeau: None declared, Diederik De Cock: None declared, Radboud Dolhain Grant/research support from: UCB Pharma B.V, Frauke Förger: None declared, Doreen Goll: None declared, Anna Moltó: None declared, Rebecca Özdemir: None declared, Luigi Raio: None declared, Catherine Nelson-Piercy Consultant for: UCB, Speakers bureau: UCB, Sebastian C Rodriguez-García: None declared, Savino Sciascia: None declared, Marianne Wallenius: None declared, Astrid Zbinden: None declared, Angela Zink Speakers bureau: Speakers fees from AbbVie, Janssen, Pfizer, Roche, Sanofi, Anja Strangfeld Speakers bureau: Speakers fees from Bristol-Myers Squibb, MSD, Pfizer, Roche
DOI: 10.1136/annrheumdis-2019-eular.4021

FRIDAY, 14 JUNE 2019

The future of therapeutic strategies

OP0327

FECAL MICROBIOTA TRANSPLANTATION IN SYSTEMIC SCLEROSIS: A DOUBLE-BLIND, PLACEBO-CONTROLLED RANDOMIZED PILOT TRIAL

Anna-Maria Hoffmann-Vold, Håvard Fretheim, Brian K Chung, Henriette Didriksen, Espen S Bækkevold, Øyvind Midtvedt, Cathrine Brunborg, Torhild Garen, Tore Midtvedt, Johannes R Hov, Knut Ea Lundin, Øyvind Molberg. *Oslo University Hospital, Oslo, Norway*

Background: Systemic sclerosis (SSc) is a progressive, multi organ, autoimmune disease marked by frequent and severe gastrointestinal (GI) afflictions and gut dysbiosis.
Objectives: Determine the safety and efficacy of fecal microbiota transplantation (FMT) using commercially-available anaerobic cultivated human intestinal microbiota (ACHIM) in patients with SSc.
Methods: The trial was a single-center, randomized, double-blind, placebo-controlled 16-week pilot of FMT by gastroduodenoscopy of ACHIM in SSc conducted at Oslo University Hospital. Primary endpoints were safety and clinical efficacy on GI symptoms assessed at weeks 4 and 16. Safety was assessed by observation, interviews and standardized safety form. Efficacy on GI symptoms was measured using the UCLA GIT 2.0 score questionnaire. Patients were defined as responders if reported symptom improvement was equivalent to the UCLA GIT definition of "minimally clinically important difference". Secondary and explorative endpoints included changes in relative abundance of total, immunoglobulin (Ig)A- and IgM-coated fecal bacteria measured by 16s rRNA sequencing; changes in modified Rodnan skin score, lung function, CRP, ESR, and patient and physician global. Descriptive statistics were applied for clinical endpoints and linear mixed models for microbial analysis.
Results: Ten patients with limited cutaneous SSc randomized to ACHIM (n=5) or placebo (n=5) were included. All patients were female with clinical apparent GI symptoms, mean age of 62 years and mean time from diagnosis of 12 yrs. Two placebo controls experienced procedure-related serious adverse events; one developed laryngospasms at first gastroduodenoscopy necessitating study exclusion, one duodenal perforation at final gastroduodenoscopy. Improvement in total GIT score was reported by 3/5 FMT patients compared to 2/4 placebo controls at weeks 4 and 16 (Figure 1). FMT effects were most pronounced on lower GI symptoms, with improvement reported by 5/5 FMT patients with diarrhea, distention/bloating and/or fecal incontinence at baseline compared to 2/4 placebo controls (Figure). Clinical secondary endpoints showed no differences and other side effects (stomach discomfort, bloating and diarrhea) were mild and transient. Fecal microbiota diversity (observed number of operational taxonomic units) was increased after FMT compared to placebo treatment at week 16 ($p<0.006$). Moreover, abundant bacterial genera in ACHIM were present within the total, and IgA- and IgM-coated fecal bacteria at both week 4 and 16 in the FMT group (Figure 2) but not in the placebo controls.

Ann Rheum Dis: first published as 10.1136/annrheumdis-2019-eular.4021 on 27 May 2019. Downloaded from http://ard.bmj.com/ on April 26, 2024 by guest. Protected by copyright.