### BRASS NEWSLETTER

2017

# The New Orthopaedic and Arthritis Center



The Building for Transformative Medicine

The new Orthopaedic and Arthritis center moved from 45 Francis Street to 60 Fenwood Road in the new Building for Transformative Medicine on October 3, 2016. We look forward to seeing you at our new location.

### A Note from the Directors

Thank you to all of you who have loyally participated in the BRASS registry for almost fourteen years! We have created one of the most comprehensive RA cohorts in the country because of your devotion to the study.

This year research from the BRASS registry was well represented at the National American College of Rheumatology Conference in Washington DC (see page 6). We presented data on how well biologic medication use overtime is effective in reducing disability in rheumatoid arthritis and we used data on rheumatoid arthritis flares to assess which treatment strategies most likely result in a successful post flare outcome. Please visit our website for more information on our research (<a href="www.brassstudy.org">www.brassstudy.org</a>) or like our page on Facebook.

This year we welcomed new sponsors Sanofi/Regeneron and Dxterity to the study. Also, we continue to be supported by Amgen, Bristol Myers Squibb, and UCB. We look forward to another successful year and we thank all BRASS participants for their dedication to the project.

Sincerely,

Nancy A. Shadick, MD, MPH; Principal Investigator

Michael Weinblatt, MD; Principal Investigator



From left to right: Miranda Girard (Research Assistant); Michelle Frits (Sr. IT Analyst); Taysir Mahmoud (Data Manager); Gabriela Maica (Research Assistant); Christine Iannaccone (Sr. Project Manager)

**BRASS** Newsletter 2017



## Screening for Interstitial Lung Disease in Rheumatoid Arthritis

All current BRASS subjects are being invited to participate in a research study called, "Screening for Interstitial Lung Disease in Rheumatoid Arthritis."

The purpose of this study is to develop a way to predict a disease called interstitial lung disease or pulmonary fibrosis, a disorder of the lungs that consists of scarring of lung tissue that can be associated with rheumatoid arthritis. This could allow doctors to identify which individuals with rheumatoid arthritis need CT scans and lung function tests, as well as better measure disease activity.

We are looking for patients over the age of 18 years old with rheumatoid arthritis. Participation would involve a clinic visit at Brigham and Women's Hospital, during which you would be formally enrolled in the study. There are no medications involved. Participation includes filling out questionnaires, giving blood samples, seeing how far you can walk in 6 minutes, and obtaining lung function tests and a CT scan. After the initial clinic visit, there will be one similar follow-up visit two years later.

Compensation for this study includes reimbursement for parking and a \$25 Amazon gift card, which you will receive at the time of the study visit. If you would like to learn more about the study, please contact Dr. Tracy J. Doyle (study primary investigator) at 617-525-6799 or at tjdoyle@partners.org

Doyle TJ, Patel AS, Hatabu H, Nishino M, Wu G, Osorio JC, Golzarri MF, Traslosheros A, Chu SG, Frits ML, Iannaccone CK, Koontz D, Fuhrman C, Weinblatt ME, El-Chemaly SY, Washko GR, Hunninghake GM, Choi AM, Dellaripa PF, Oddis CV, Shadick NA, Ascherman DP, Rosas IO. Detection of Rheumatoid Arthritis-Interstitial Lung Disease is Enhanced by Serum Biomarkers. Am J Respir Crit Care Med. 2015 Mar 30.

#### Diet and Rheumatoid Arthritis Symptoms

Patients with RA often ask if specific types of foods, popularized as "inflammatory" or "anti-inflammatory" can improve or worsen their disease symptoms. BRASS investigators surveyed a sample of 300 patients to gather information about whether RA patients feel certain foods affect their RA symptoms.

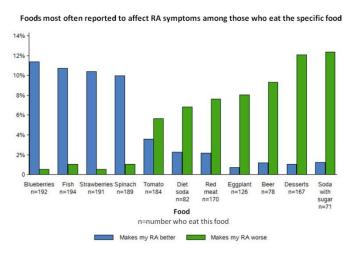
Participants were asked to report on the frequency of eating 20 foods and whether these foods make their RA symptoms better, worse, or unchanged. Data on patient demographics, medications, comorbidities, and RA disease activity from the BRASS semi-annual questionnaires were used to evaluate associations between patient characteristics and change in RA symptoms from specific foods.

Two-hundred and seventeen BRASS patients responded to the survey. 83% were female and the average RA disease duration for patients answering the survey was 17 years. About 58% of BRASS patients who responded to the diet survey were using biologic disease modifying anti-rheumatic drug (DMARD) as part of their RA medication regimen. Of those who answered

the survey, 24% reported that foods affect their RA; with 15% reporting that foods improve their disease and 19% reporting foods that worsen their disease.

Blueberries and spinach were the foods most often reported to improve RA symptoms, while sugar and desserts were most often reported to worsen RA symptoms. Patients who reported that foods affect their RA were younger and were more likely to note that their RA disease was improved by sleep, warm room temperature and use of vitamins/minerals. Medications, gender, body mass index (BMI), smoking, RA disease duration, RA disease activity, and self-reported RA flares were not associated with reporting that foods affect RA.

While we cannot draw strong conclusions based on this survey alone, past work has shown that greater consumption of sugar-sweetened beverages is associated with increased risk for developing RA. A future study, with a more detailed food frequency questionnaire, will help assess the associations of specific foods with RA disease symptoms.



Tedeschi SK, Frits M, Cui J, Zhang ZZ, Mahmoud T, Iannaccone C, Lin T-C, Yoshida K, Weinblatt ME, Shadick NA, Solomon DH. Diet and Rheumatoid Arthritis Symptoms: Survey Results From a Rheumatoid Arthritis Registry. Arthritis Care & Research. 2017 [epub ahead of print]

## The BRASS Registry Recruitment and Retention



Collecting routine clinical data from the BRASS participants can serve an important role in understanding "real world" care in RA. However, little is known about the patient experience in registries, which motivated BRASS investigators to survey patients about their participation in the registry.

Investigators sent out surveys to a sample of the patients in the study. The survey focused on reasons for enrollment, reasons to stay enrolled, methods for survey completion, frequency of the surveys, gifts for participation, and specific topics that should be covered by questionnaires. They also asked a small sample of BRASS patients' the reasons for missing study visits and questionnaires.

The top three motivating factors for deciding to enroll in the BRASS registry were: desire to help others, hope that it would help manage their RA, and ease of volunteering. The next common response was that the physician had convinced the patient about the value in participating. Factors associated with remaining in the study included remuneration for time participating, information on a patient's condition, and feedback about the study surveys. However, most participants stated that they would remain involved no matter what.

In BRASS, a mailed paper survey was the most preferred method for completing surveys.

Telephone and personal device application surveys were the least preferred. However, younger patients were more likely to prefer surveys via e-mail, internet or phone application.

BRASS patients stated that every 4-6 months was the most frequent they would answer surveys. Patients who were inconsistent responders to BRASS surveys and visits most commonly reported they had changed rheumatology providers away from the hospital or that life events had interrupted their participation.

The data collected from these surveys should help inform registry design and recruitment/retention strategies. With the likely continued growth in patient registries to collect clinical data for research, researchers need to continue to help engage patients to be active in research and find additional methods for data collection.

DH Solomon, NA Shadick, ME Weinblatt, M Frits, C Iannaccone, A Zak, JR Korzenik. Clinical Patient Registry Recruitment and Retention: A Survey of Patients in Two Chronic Disease Registries. BMC Medical Research Methodology, In press, 2017.



#### **American College of Rheumatology BRASS Presentations**

- 1. Ahmad H, Alemao E, Guo Z, Frits M, Weinblatt M, Shadick NA. Association of Anti-Citrullinated Protein Antibody Positivity and Titer Levels to Low Hand BMD, and the Consequence of Low Hand BMD on DAS28 (CRP) Remission in Established RA: Findings from a US Observational Cohort [abstract]. Arthritis Rheumatol. 2016; 68 (suppl 10).
- 2. Alemao E, Guo Z, Burns L, Frits M, Coblyn J, Weinblatt M, Shadick N. Evaluation of the Association Between C-Reactive Protein and Anti-Citrullinated Protein Antibody in Rheumatoid Arthritis: Analysis of Two Clinical Practice Data Sets [abstract]. Arthritis Rheumatol. 2016; 68 (suppl 10).
- 3. Iannaccone C, Mahmoud TG, Cui J, Weinblatt M, Shadick N. Symptoms of Depression and Anxiety Predict Worse Disease Activity and Functional Disability in a Cohort of Established Rheumatoid Arthritis Patients [abstract]. Arthritis Rheumatol. 2016; 68 (suppl 10).
- 4. Tedeschi SK, Frits M, Iannaccone C, Weinblatt M, Shadick NA, Bermas BL. Rheumatoid Arthritis Flares and Pregnancy Outcomes Among Women in a Longitudinal Registry [abstract]. Arthritis Rheumatol. 2016; 68 (suppl 10).
- 5. Mahmoud TG, Frits M, Iannaccone C, Bykerk VP, Bingham C III, Weinblatt M, Shadick NA. Correlates of Successful Flare Management: The Role of Clinician-Driven Treatment, Home-Based Strategies, and Medication Change [abstract]. Arthritis Rheumatol. 2016; 68 (suppl 10).
- 6. Shadick NA, Gerlanc N, Frits M, Stolshek BS, Brady B, Iannaccone C, Collier D, Cui J, Mutebi A, Weinblatt M. The Longitudinal Impact of Biologic Use on Disability within a RA Registry [abstract]. Arthritis Rheumatol. 2016; 68 (suppl 10).

#### Follow the BRASS Study on Facebook!



#### https://www.facebook.com/brassstudy/

Please follow us on Facebook. We will be posting links to our newest research publications, as well as, study updates, staff updates, and links to related to rheumatoid arthritis and research.