## MAY 21-24 | SAN DIEGO, CA

# Celiac Disease Symptom Flares are Common During the Postpartum Period

M. BANEGAS 1,2,3, M. GELLER 4, D. LEFFLER 5, J. SILVESTER 1,3, A. THERRIEN 1,2

- <sup>1</sup>Celiac Disease Research Program, Harvard Medical School, Boston, MA, USA
- <sup>2</sup>Celiac Center, Beth Israel Deaconess Medical Center, Boston MA, USA
- <sup>3</sup> Division of Gastroenterology, Hepatology and Nutrition, Boston Children's Hospital, Boston, MA, USA
- <sup>4</sup> Celiac Disease Foundation, Woodland Hills, CA, United States
- <sup>5</sup> Takeda Pharmaceuticals Co. Cambridge, MA. USA

## **INTRODUCTION**

- Celiac Disease (CeD) is frequently diagnosed during the third trimester or postpartum period because of development of gastrointestinal (GI) symptoms.
- Whether women with established CeD on a gluten-free diet (GFD) may also experience a recurrence of symptoms in the post-partum period has not been examined.
- Previously, we retrospectively identified 70 pregnant women with an established CeD diagnosis; 10% (n=7) met with their health care provider because of a postpartum CeD symptom flare.

#### AIM

 Examine the occurrence of CeD symptom flare during postpartum in women with CeD in the USA

#### **METHOD**

- An online survey with questions related to celiac disease symptoms before, during and after pregnancy was sent to women registered in iCureCeliac-a voluntary, patient-powered research network hosted by the Celiac Disease Foundation.
- Inclusion criteria: to already be diagnosed with CeD at the time of the pregnancy and to be following a gluten-free diet.
- Exclusion criteria: Non-responsive celiac disease (NRCD) pre-pregnancy
- A symptom flare was defined as the occurrence of symptoms that were attributed to CeD by the respondent

### **RESULTS**

- 309 women participated in the national survey, 40 of whom met eligibility criteria.
- 18 (45%) reported a CeD symptom flare with onset during the postpartum period (Figure 1).
- Most common symptoms were abdominal pain (66%), bloating (61%), and diarrhea (44%). Extra-intestinal manifestations such as: rash, fatigue, brain fog and myalgias, were reported by 22% (Figure 2).
- Symptoms typically lasted for more than one week (57%) (Figure 3).
- Among the women with symptom flares, 55% reported gluten exposure during postpartum compared to 16% of the asymptomatic women. (Figure 4).
- All women with symptom flares experienced them during their first pregnancy and had a recurrence during subsequent postpartum periods (n=18)

#### **RESULTS**

Figure 1. Eligible Participants Included in the CeD-Preg Survey Study

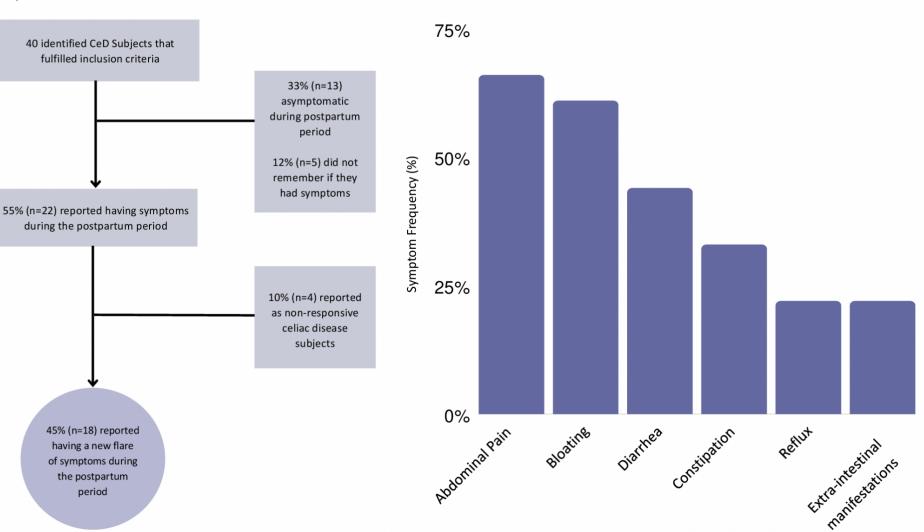


Figure 2. Gastrointestinal Symptoms and Extraintestinal Manifestations reported by women with flares of Celiac Disease during the Postpartum Period.



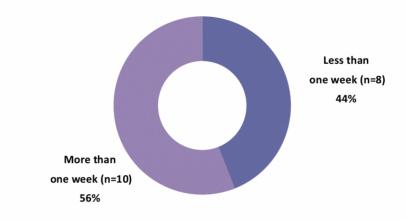
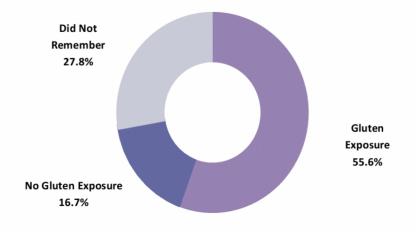


Figure 4. Gluten Exposure reported Among Survey Participants



## **CONCLUSIONS**

- · Postpartum symptom flares may be frequent in women with known celiac disease
- The most common symptom reported was abdominal pain.
- Many women report gluten exposures, but occurrence of symptoms in the postpartum period could also suggest hormonal effects on the GI tract and immune tolerance.
- Further evaluation in a larger prospective case-control study is on-going.

### **ACKNOWLEDGEMENTS**

Special acknowledgement to the Celiac Disease Foundation and National Celiac Association

## **CONTACT INFORMATION**

CD-Preg Study (ongoing prospective study) cdpreg@bidmc.harvard.edu

Amelie Therrien atherri1@bidmc.harvard.edu

Marcela Banegas mbanegas@bidmc.harvard.edu