

The manuscript presents an interesting study that evaluates the dynamic thiol/disulphide homeostasis in celiac patients. The study involves 73 patients with celiac disease and 73 healthy volunteers. The results show that there is a negative correlation between celiac autoantibodies, and native thiol, total thiol levels and native thiol/total thiol ratio, while a positive correlation is suggested between disulphide, disulphide/native thiol and disulphide/total thiol levels. In conclusion this study proposes that the patients with celiac disease the dynamic thiol/disulphide balance shifts through disulphide form compared to the healthy individuals.

- **I would like to thank the reviewer for his/her valuable assessments on behalf of myself and the co-authors.**

Minor revisions required: ?

1-Minor language polishing and mistapeing : in the introductio and statistical analysis. ?

- **Whole manuscript was proofread by a native speaker as per your suggestion.**

2-The same group recently published thiol/disulphide balance shifts in IBD, would be interesting to compare in the text the different pathologies ?

- **We mentioned this study in discussion part but a detailed comparision is not done. We mentioned that IBD is a inflamatory disorder and oxidant radicals also increase in IBD.**

3- If available would be interesting to add the levels of Vit D in these 146 individuals; there are data about the impact of this vitamin on the thiol and disulphide levels. ?

- **We don't have data about vit D levels of our patients.**

4-Please add for how long the celiac patients were in GFD (or at least indicate the minimal time) and if they show any persistence of mucosal inflammation

- We made two subgroups (GCD: patients non-compliant with gluten free diet, GFD: patients compliant with gluten free diet, ) to understand the effect of diet in oxidative stress in CD. Patients compliance to gluten diet is obtained from patients files and applied questionnaires. Patients that is compliant to gluten free diet from the beginning and at least 5 years period are included to GFD group.

*Reviewed by 03261349*

In the present paper, entitled “Thiol/disulphide homeostasis in celiac disease”, Kaplan et al measured thiol/disulphide homeostasis, an indirect evaluation for oxidative stress, in patients with celiac disease.

- **I would like to thank the reviewer for his/her valuable assessments on behalf of myself and the co-authors.**

Main comments:

1-A minor linguistic revision is necessary

- **Whole manuscript was proofread by a native speaker as per your suggestion.**

2-It is unclear whether enrolled celiac patients were first diagnosed (i.e. during gluten containing diet) or received a gluten free diet (GFD).

- **Celiac group is composed of first 73 celiac patients, over the age of 18, who admitted to the polyclinic for routine control.’ Patients that diagnosed CD with endoscopic biopsy and under regular follow-up in our clinic were included in the patient group in order of application. Namely gluten diet compliance is firstly diagnosed in our clinic but we enrolled this patients according to their gluten diet compliance that we obtained from questionnaires and patient history.**

3- Despite the results refer to a response to GFD, thus explicating that some patients had GFD, and moreover in Table 2 a comparison GFD vs GCD is present, this detail should be clearly stated in the “Methods” section.

- **We mentioned it in methods part**

4-Anyway, it would have been interesting to evaluate thiol/disulphide homeostasis before and after GFD. Indeed, GFD could bring positive effects on oxidative damage.

- **As we mentioned above we took our patients from our celiac disease policlinic. Our patients files and questionnaires give us true information about diet**

**compliance. Because of this reason we can say that GVD bring positive effects on oxidative damage.**

5-The definition of poor compliance to diet is cloudy.

- **Poor compliance to diet is defined as taking any kind of gluten containing materials.**

6- Did the patients have positive anti-transglutaminase antibody despite GFD?

- **Yes**

7-In table 3, Authors found a direct correlation between age and thiols. This is a strange finding, since one may expect that the process of aging could increase oxidative damage.

- **There are many contrubuting factors affecting oxidative damage like diet compliance, antibodies other than age. You are right that age can affect oxidative status but there is not age difference between groups and age is only correated with thiol levels.**

8- A correlation between thiol/disulphides and severity of villous atrophy (Marsh classification) is lacking. Indeed, it is possible that the higher the severity of mucosal lesions, the higher the inflammation (see Ierardi E et al, Saudi J Gastroenterol 2015), and the higher the oxidative stress.

- **You are right about this issue but we could not find March classification of our patients in their files.**