

Clinical and Pathological Correlation and Concomitant Upper Gastrointestinal System Pathologies in Children Diagnosed with Celiac



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Introduction:

Celiac disease is a gluten-induced enteropathy. Tissue transglutaminase (tTG) and endomysium antibodies (EMA), which are serological markers associated with celiac, increase in titer and histopathological changes often seen in the duodenum are helpful in the diagnosis. Although the affected area is usually the small intestine, samples are taken from the duodenum, stomach, and esophagus during the biopsy. The aim of this study is to determine the gastric and esophageal pathologies accompanying the duodenal lesion in celiac biopsy specimens. It will be tried to reveal whether these changes are related to the severity of the duodenal lesion. In addition, it will be tried to determine whether there is a relationship between the measured antibody titers and the severity of histopathological changes.

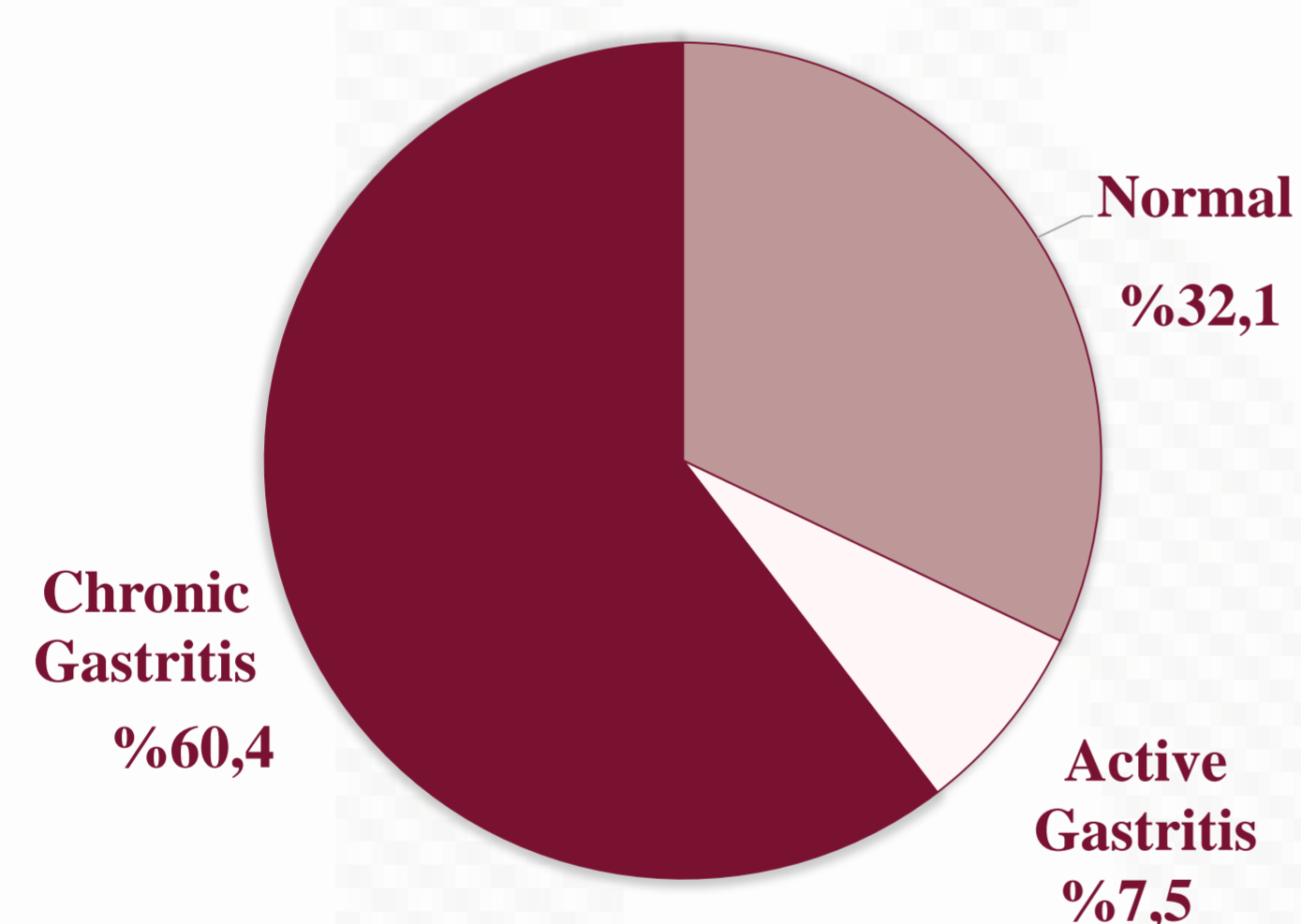
Method:

The study included, 53 pediatric patients diagnosed with celiac at Bezmialem Vakıf University between 2015-2022. The esophagus, stomach and duodenum biopsy results and antibody levels of the patients were examined.

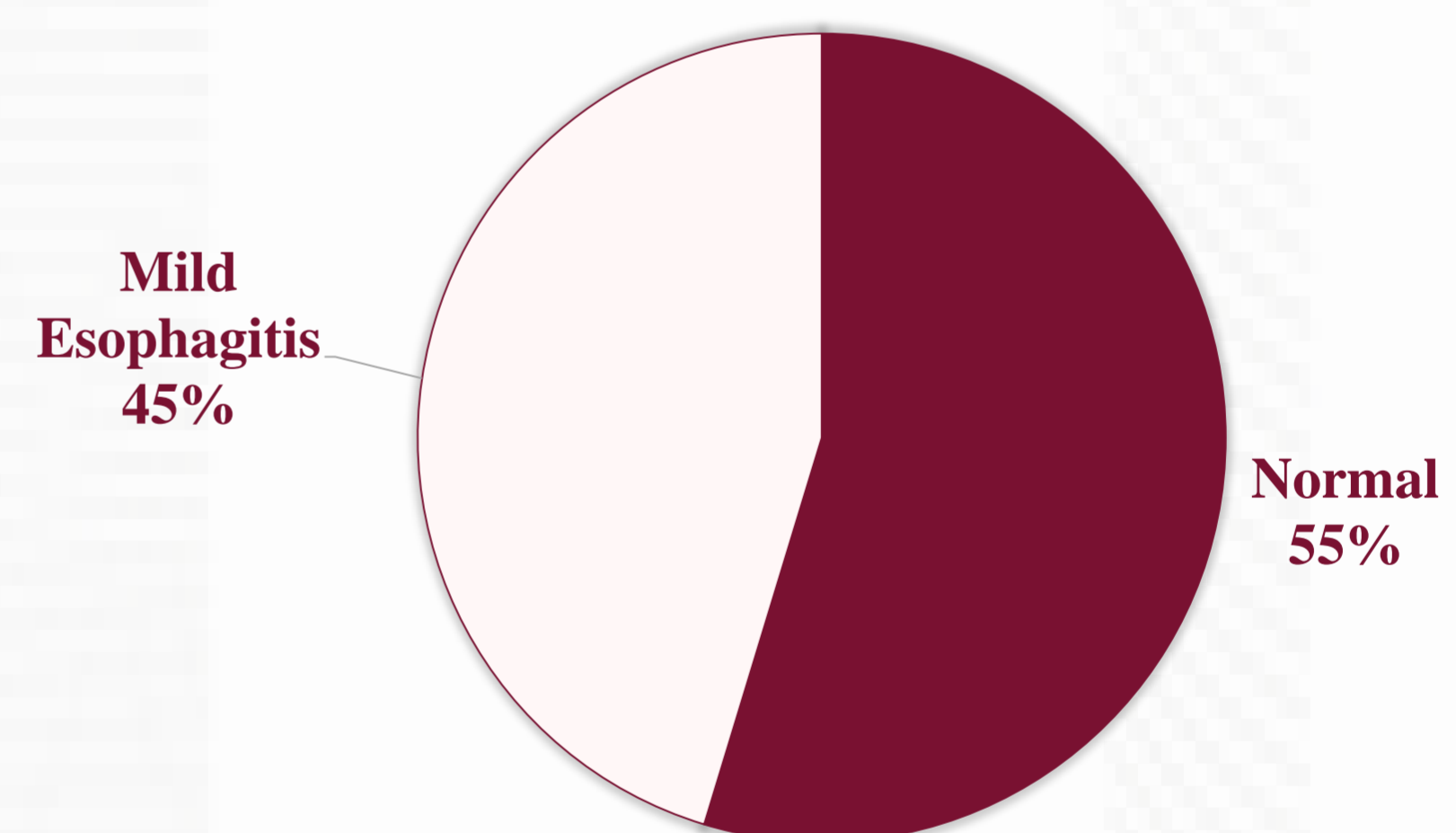
Results:

All duodenal biopsies were consistent with celiac pathology. The gastric pathologies were found to be normal in 32.1%, active gastritis in 7.5%, chronic gastritis in 60.4%. The esophageal pathologies were found to be normal 54.7% and mild esophagitis 45.3%. The relationship between tTG, anti-EMA, gastric and esophageal pathologies and the severity of duodenal lesion was investigated using the Chi-Square test.

GASTRIC PATHOLOGIES



ESOPHAGEAL PATHOLOGIES



Conclusion:

Celiac disease often affects the duodenum. This study showed that active gastritis, chronic gastritis and mild esophagitis may accompany duodenal lesion. In the light of these results, gastric and esophageal biopsies from patients who have duodenal biopsy for celiac disease will be more beneficial for the clinical evaluation of the patient. The limitation of this study was the inability to compare the relationship between antibody titers, gastric and esophageal pathologies, and the severity of duodenal lesion, as the number of similar patients with different marsh grades could not be found. We think that better results can be obtained when the large sample size is reached.

Key words: celiac disease, tissue transglutaminase(tTG), endomysium antibodies(EMA), gastritis, esophagitis

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