

# Treatment of Celiac Disease with Single Medicine: A Case Report

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**Abstract:** A case of celiac disease is well taken with all the information regarding patient like personal information, family history, past history of any complaints and worked out according to the principles of Law of Simillia, took many symptoms regarding celiac disease as well other than celiac disease like physical complaints and mental complaints which may or may not be related to celiac disease so selected all the symptoms present in body. Then comes the follow up which is full of fluctuation of symptoms as well as reports regarding celiac disease i.e TTG-IgA and which is overall a different and essential task and the result fundamentally depends upon the unadulterated prescription. Further to processed the need for Repertory felt, so according to the case selected Kent Repertory because of much and more prominent physical symptoms. Now with the help of Repertorization, symptoms have been converted to rubrics. Then most similar medicine has been selected. Pulsatilla Nigricans is selected, which covers maximum symptoms and marks. The well selected medicine Pulsatilla Nigricans 200 had great role in the eradication of disease. The aim of this article is to show the efficacy of Homoeopathic medicine in celiac disease although each and every cases of celiac is different from every case of celiac disease.

**Keywords:** Celiac Disease, Repertory, Pulsatilla Nigricans, Homoeopathy

## 1. Introduction

Celiac disease (CD) is a life-long autoimmune disorder characterized by an immunologically mediated enteropathy induced by the dietary gluten, which improves with the exclusion of the toxic protein from diet. The disorder affects genetically susceptible individuals carrying the human leukocyte antigen (HLA) class II DQ2 and/or DQ8.<sup>1</sup>

Celiac disease (CD) is associated with genetic characteristics and gluten exposure. In recent studies in which genetic markers were used, small intestinal histologic changes, serum immune reactivity and clinical features show that there are subjects with some but not all of its characteristics, posing a difficult question of how to de-fine the disease<sup>2</sup>.

CD is associated with HLA molecules DQ2 (90%–95%) and DQ8 (5%–10%), and in the continued presence of gluten the disease is self-perpetuating. CD is one of the most common lifelong disorders worldwide and is characterized by a variety of clinical presentations. These include the typical malabsorption syndrome (classic symptoms) and a spectrum of symptoms potentially affecting any organ or body system (nonclassic symptoms). Because CD often is atypical or even clinically silent, many cases go undiagnosed and are exposed to the risk of long-term complications. There is growing interest in the social aspects of CD because the burden of illness related to this condition is doubtless higher than previously thought<sup>3</sup>.

Abdominal symptoms are common in primary care, with an annual incidence of 35 to 40 per 1000 individuals. Chronic abdominal symptoms can adversely affect daily functioning and quality of life. For the primary care physician, the diagnostic challenge is to discriminate between patients with

functional gastrointestinal problems only and those with organic disease, such as celiac disease<sup>4</sup>

### 1.1 What is Celiac Disease

Celiac disease, also spelled, Coeliac disease, Gluten allergy, Gluten intolerance, wheat allergy, Wheat intolerance, is an autoimmune disorder of the gut (small intestine) that occurs in hereditarily predisposed individuals of all ages from middle infancy onward.

Celiac disease is a unique autoimmune disorder in which the environmental precipitant, gluten, is known. Originally considered a rare malabsorption syndrome of childhood, celiac disease is now recognized as a common condition that may be diagnosed at any age and that affects many organ systems. This review discusses the pathogenesis, diagnosis, and management of the disease.<sup>5</sup>

In INDIA as per the data of J K Loan hospital Jaipur – According to the medical reports, there are about 2,000 children in Jaipur and about 3,50,000 in Rajasthan state have been suffered of wheat allergy. Worldwide celiac disease influences between 1 in 100 and 1 in 200 people; rates do, however, vary between different areas of the world from as few as 1 in 300 to as many as 1 in 40<sup>6</sup>.

Wheat allergy is an allergy which usually indicates as a food allergy, but can also be a touch allergy consequential from occupational contact to wheat. Similar to all allergies, wheat allergy occupies immunoglobulin E and mast cell response. Typically, the allergy is limited to the seed storage proteins of wheat, some reactions are restricted to wheat proteins, while others can react across many ranges of seeds and other plant tissues. Wheat allergy may be a misnomer while there

are numerous allergenic constituents in wheat, such as protease inhibitors, gluteins and prolamins and altered responses are often attributed to various proteins. 27 prospective wheat allergens have been effectively identified. Gluten sensitivity is not generally classified as a wheat allergy<sup>7</sup>.

## 2. Pathogenesis

Celiac disease results from the interaction between gluten and immune, genetic, and environmental factors.

### 2.1 The Role of Gluten

Celiac disease is induced by the ingestion of gluten, which is derived from wheat, barley, and rye. The gluten protein is enriched in glutamine and proline and is poorly digested in the human upper gastrointestinal tract. The term "gluten" refers to the entire protein component of wheat; gliadin is the alcohol-soluble fraction of gluten that contains the bulk of the toxic components. Undigested molecules of gliadin, such as a peptide from an  $\alpha$ -gliadin fraction made up of 33 amino acids, are resistant to degradation by gastric, pancreatic, and intestinal brush-border membrane proteases in the human intestine and thus remain in the intestinal lumen after gluten ingestion.<sup>4</sup> These peptides pass through the epithelial barrier of the intestine, possibly during intestinal infections or when there is an increase in intestinal permeability, and interact with antigen-presenting cells in the lamina propria.

### 2.2 Mucosal Immune Responses

In patients with celiac disease, immune responses to gliadin fractions promote an inflammatory reaction, primarily in the upper small intestine, characterized by infiltration of the lamina propria and the epithelium with chronic

inflammatory cells and villous atrophy (Fig. 1). This response is mediated by both the innate and the adaptive immune systems. The adaptive response is mediated by gliadin-reactive CD4<sup>+</sup> T cells in the lamina propria that recognize gliadin peptides, which are bound to HLA class II molecules DQ2 or DQ8 on antigen-presenting cells; the T cells subsequently produce proinflammatory cytokines,<sup>5</sup> particularly interferon- $\gamma$ .<sup>6</sup> Tissue transglutaminase is an enzyme in the intestine that deamidates gliadin peptides, increasing their immunogenicity.<sup>7</sup> The ensuing inflammatory cascade releases metalloproteinases and other tissue-damaging mediators that induce crypt hyperplasia and villous injury.<sup>8</sup> Gliadin peptides also activate an innate immune response in the intestinal epithelium that is characterized by increased expression of interleukin-15 by enterocytes, resulting in the activation of intraepithelial lymphocytes expressing the activating receptor NK-G2D, a natural-killer-cell marker.<sup>9</sup> These activated cells become cytotoxic and kill enterocytes with surface expression of major-histocompatibility-complex class I chain-related A (MIC-A), a cell-surface antigen induced by stress, such as an infection.<sup>10,11</sup> The mechanism of the interaction between the processes in the epithelium and lamina propria has not been elucidated.<sup>8</sup>

## 3. Diagnostic Criteria

Growth problems, Failure to gain weight

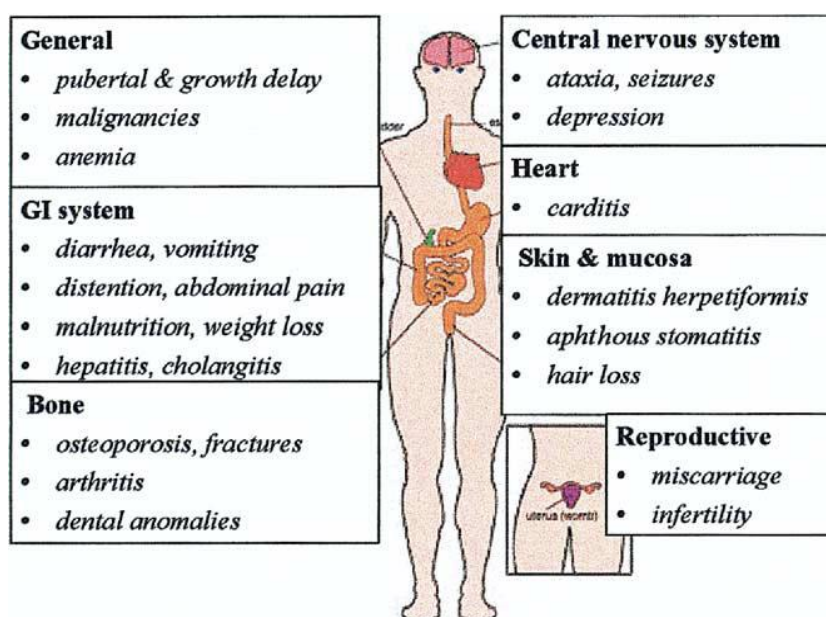
Chronic diarrhea, which can be bloody or may be Chronic constipation

Vomiting, Fatigue

Abdominal bloating and pain, Irritability

Anemia, associated with iron deficiency, is most often due to increased blood loss, or impaired iron absorption. Iron-deficiency anemia is often recorded in newly diagnosed celiac disease<sup>9</sup>.

*System wise symptoms*<sup>10</sup>



## 4. Prognosis

Complications of celiac disease include refractory disease, collagenous sprue, and intestinal lymphomas. Intestinal lymphomas affect 6 to 8% of patients with celiac disease,

usually manifesting after 20 to 40 yr of disease. The incidence of other GI cancers (eg, carcinoma of the esophagus or oropharynx, small-bowel adenocarcinoma) also increases. Adherence to a gluten-free diet can significantly reduce the risk of cancer. If people who have

been doing well on a gluten-free diet for a long time once again develop symptoms of celiac disease, physicians usually do upper endoscopy with small bowel biopsy to check for signs of intestinal lymphoma<sup>11</sup>.

The association between type 1 diabetes and celiac disease is well documented in young people, although reported rates vary. Prevalence rates from both cross-sectional and longitudinal studies range from 1.6% to 16.4% worldwide, with the majority of studies only including children and adolescents. In contrast, CD prevalence is 0.3% to 1.0% in the general population of all ages. A greater risk is conferred by female gender, younger age, and, in type 1 diabetes, younger age at diabetes diagnosis<sup>12</sup>.

## 5. Diagnosing Celiac Disease

Until the 1950s, the diagnosis of CD was based on clinical observations focused on malabsorptive features. The peroral intestinal biopsies, introduced in 1956, marked a significant change in CD diagnosis. Since then, histological assessment of intestinal mucosa, with evidence of characteristic gluten-dependent mucosal damage, is considered the gold standard for CD diagnosis<sup>13</sup>.

Capsule endoscopy (CE) is a useful tool for evaluating small-bowel disease, but appropriate indications and rates of detection, completion, and retention vary.<sup>14</sup>

Nowadays TTG-IgA test is most popular among because it is very cheap and very trustworthy. In this we can see how much allergy.

### Case Study

A male Child (O.P.D. Regd. No: **94311**, X Kasana, 6 years old patient from Greater Noida, Uttar Pradesh. He was diagnosed as a celiac patient at the age of 4 years.

The main symptoms present in X Kasana were —

- Diarrhea 2-3 times, watery stools
- Cramping type of pain before loose motions
- Excessive gas formation
- Abdominal pain due to gas formation which is relieved by passing flatus

### 5.1 Personal History

OPD No: 94311 Case No: 30 Date: 24/02/219	Name: X Kasana Age/Sex: 6years/Male/child
Father's Name: Mr Vikram Kasana	Marital Status: Unmarried Religion: Hindu
Address: Jaypee green spa court, greater noida (UP) 201308	
Occupation/Education: Student	Diagnosis: Celiac Disease Miasmatic Diagnosis: Psora
Socio-economical Status: High	
Result: Improvement	

### Patient as a Person:

Appetite:	½- 1 chapati/day, twice a day.
Thirst:	2-2½ litres/day, satisfactory
Stool:	Diarrhea with cramping type of pain
Urine:	N/S
Desire:	Row foods
Aversion:	Fatty and rice foods

Addiction:	N/S
Thermal Reaction:	Hot
Bathing Habit:	Cold water in all seasons
Perspiration:	N/S
Sexual History:	N/S
H/o Vaccination:	Taken at that time
Menstruation:	N/A
Sleep/Position during Sleep:	Sound sleep, 7-8 hours

### Mind:

- Anguish after defecation.
- Carried.
- Homesickness
- Envy.
- Impatience during sitting.

Family History	
Paternal	Maternal
Father – H/A (35yrs)	Mother – H/A (33yrs)
Brother – H/A (8yrs)	Gr. Father – Thyroid/ Alive (69yrs)

### Physical Examination:

Weight: 19 kgms	Tongue: Moist, clean
Temperature: 98.6 °F	Pallor: Absent
Pulse: 88 b/m	Icterus: Absent
BP: N/S	Cyanosis: Absent
R/R: 20/m	Edema: Absent
Lymphadenopathy: Not palpable	Clubbing: Absent
Skin: Healthy	

### Systemic Examination

#### Cardiovascular System:

Not abnormality found

#### Respiratory System:

Not abnormality found

#### Nervous System:

Not abnormality found

#### Gastrointestinal System:

Not abnormality found

### GYNE/OBS HISTORY:

N/A

### Laboratory Investigations

#### TTG-IgA

10-02-2019

TTG-IgA 41 U/ml

### Analysis of Case (Kent's Method):

#### Mental Generals:

- Anguish after defecation.
- Carried.
- Homesickness.
- Envy.
- Impatience while sitting.

**Physical Generals:**

- Aversion to fatty and rice food.
- Desire for raw food.
- Hot patient.

**Modalities:**

- > Stool
- > Flatus

**Particulars:**

- Diarrhea 2-3 times, watery stools
- Cramping type of pain before loose motions
- Excessive gas formation
- Abdominal pain due to gas formation which is relieved by passing flatus

**Evaluation of Symptoms:**

- 1) Anguish after defecation.
- 2) Carried.
- 3) Homesickness.
- 4) Envy.
- 5) Impatience while sitting.
- 6) Aversion to fatty and rice food.
- 7) Desire for raw food.
- 8) Cramping pain relieved after passing flatus.
- 9) Cramping pain relieved after stool.

**Concomitants:**

- Vomiting with loose motions

**Common symptoms:**

- General debility

**Repertorial Totality**

S. No.	Symptom	Chapter/Rubric	Page No.
1.	Anguish before defecation.	MIND-ANGUISH-stool,before	3
2.	Carried.	MIND-CARRIED-desire to be	10
3.	Homesickness.	MIND-ENVY	39
4.	Envy.	MIND-HOMESICKNESS	51
5.	Impatience while sitting.	MIND-IMPATIENCE-sitting,while	54
6.	Aversion to fatty and rice food.	STOMACH-AVERSION-fat and rice food	480
7.	Desire for raw food.	STOMACH-DESIRE-row food	486
8.	Cramping pain relieved after passing flatus.	STOMACH-PAIN-flatus,passing,amel	513
9.	Cramping pain relieved after stool.	ABDOMEN-PAIN-cramping-stool,before	518

**Repertorial Analysis:**

S. No.	Remedies	Relative Value (No. of marks covered by remedy/No of rubrics covered by the remedy)
1.	Pulsatilla Nigricans	7/4
2.	Sepia	6/4
3.	Sulphur	6/3
4.	Staphysagria	5/3
5.	Arsenicum album	5/3

**Prescription:****R<sub>x</sub>**

Pulsatilla Nigricans 200 1 dose EMES

Rubrum 30 T.D.S. x 7 Days 6 hourly

- **Diet and Regimen:** Take gluten free diets like rice, maze, soya bin, all fruits and vegetables.
- **Auxiliary Measures:** Avoid taking gluten contents like wheat, rye and barley. Take only gluten free diets.

- **Justification of Selection of Remedy:** Pulsatilla Nigricans covers maximum rubrics and gets maximum marks with more suitable to the case, so phosphorus selected.
- **Justification of Selection of Potency:** 200 potency to start the treatment should be beneficial as per the susceptibility of the case.
- **Justification of Repetition of the Doses:** Dosage was given according to the severity of the case and complaints.





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## REPERTORY SHEET

Name: ms+ adwik kalsang Age & Sex: 6yrs-1 male/child Date: 24/2/2019  
OPD No.: 94311 IPD No.: — Ward/Bed No.: —

Rubrics		Page
1	MDAD-DN1005N-shoot, lat	03
2	MDAD-DN1005N-shoot, lat	10
3	MDAD-DN1005N-shoot, lat	39
4	MDAD-DN1005N-shoot, lat	51
5	MDAD-DN1005N-shoot, lat	100
6	MDAD-DN1005N-shoot, lat	100
7	MDAD-DN1005N-shoot, lat	100
8	MDAD-DN1005N-shoot, lat	100
9	MDAD-DN1005N-shoot, lat	100
10	MDAD-DN1005N-shoot, lat	100
Total		
Total Forward		
1	Brom	
2	Bry	
3	Bulo	
4	Cact	
5	Cadm	
6	Calad	
7	Calc-ar	
8	Calc-c	
9	Calc-p	
10	Calc-f	
	Calc-s	
	Cemph	
	Cann-i	
	Cann-s	
	Canth	
	Caps	
	Carb-ac	
	Carb-an	
	Carb-s	
	Carb-v	
	Card-m	
	Carl	
	Cast	
	Caul	
	Caust	
	Cedr	
	Cham	
	Chel	
	Chin	
	Chin-a	
	Chin-s	
	Chlol	
	Chlo	
	Cic	
	Cimx	
	Cimic	
	Cina	
	Cinnb	
	Cist	
	Clem	
	Cob	
	Coca	
	Cocc	
	Coc-c	
	Coff	
	Colch	
	Coloc	
	Com	
	Con	
	Cop	
	Cor-r	
	Com	
	Croc	
	Cort-c	
	Cort-h	
	Crot-t	
	Cupr	
	Cupr-ars	
	Cupr-s	
	Cur	
	Cycl	
	Dig	
	Dios	
	Dros	
	Dulc	
	Echi	
	Elaps	
	Ery-a	
	Eug	
	Eup-per	
	Eup-pur	
	Euphr	
	Eupi	
	Fago	
	Ferr	
	Ferr-ar	
	Ferr-l	
	Ferr-p	
	Fl-ac	
	Gamb	
	Gels	
	Gins	
	Glon	
	Gran	
	Graph	
	Grat	
	Guag	
	Haem	
	Ham	
	Hell	
	Helon	
	Hep-s	
	Hipp	
	Hura	
	Hydr	
	Hydr-ac	
	Hyos	
	Hyper	
	Ign	
	Indg	
Total		
Total Forward		



	1	2	3	4	5	6	7	8	9	10		1	2	3	4	5	6	7	8	9	10		1	2	3	4	5	6	7	8	9	10
Ind											Nat-c											Seneg										
Iod											Nat-m											Sep										
Ip											Nat-p											Sil										
Iris											Nat-s											Sin-n										
Jatr											Nicc											Spig										
Kali-ar											Nit-ac											Spong										
Kali-bi											Nux-m											Squill										
Kali-br											Nux-v											Stann										
Kali-c											Olind											Staph										
Kali-chl											Ol-an											Still										
Kali-H											Onos											Stram										
Kali-n											Op											Stront										
Kali-p											Osm											Sulph										
Kali-s											Pall											Sul-ac										
Kalm											Par											Syph										
Kreos											Petr											Tab										
Lac-c											Phel											Tarax										
Lac-d											Ph-ac											Tarent										
Lach											Phos											Teucr										
Lachn											Phys											Thea										
Lach-ac											Phyt											Ther										
Lact											Pic-ac											Thuja										
Laur											Pin-s											Til										
Led											Plat											Tril										
Lepi											Pib											Trom										
Lil-t											Podo											Tub										
Lob											Prun											Ust										
Lyc											Psor											Valer										
Lyss											Ptel											Verat										
Mag-c											Puls											Verat-v										
Mag-m											Pyrog											Verb										
Mag-p											Ran-b											Vib										
Mag-s											Ran-s											Viol-o										
Manc											Raph											Viol-t										
Mang											Rat											Zinc										
Med											Rheum											Zing										
Meli											Rhodo																					
Many											Rhust-t																					
Meph											Rhus-v																					
Merc											Rumx																					
Mero-c											Ruta																					
Mero-tr											Sabad																					
Merl											Sabin																					
Mez											Sal-ac																					
Mosch											Samb																					
Murx											Sang																					
Mur-ac											Sanic																					
Myric											Sarc																					
Naja											Sec																					
Nat-a											Sel																					

- Re mark
- ① Pulsatilla nigrescens - 7/4
  - ② Sepia - 6/4
  - ③ Sulphur - 6/3
  - ④ Stephylys - 5/3
  - ⑤ Isosencis album - 5/3

NOTE - Pulsatilla cover  
manipulation and get  
max. mark, so  
pulsatilla prescriber

Prescription -  
R Pulsatilla nigrescens 1d 68 RMB  
reborn to TPS 6 hour x 15 day

## Follow Up Sheet

Patient's Name: X Kasana

Age/Sex:

6yrs.

OPD No: 94311

Yrs/male/child

Date:	Symptom	Prescription
24/2/2019	Diarrhea 2-3 times, watery stools Cramping type of pain before loose motions. Excessive gas formation Abdominal pain due to gas formation which is relieved by passing flatus The TTG-IgA Was 41 U/ml.	Pulsatilla Nigricans 200 1 dose EMES Rubram 30 TDS 6 hourly X 15 days
12/3/2019	Relief in abdomen pain, loose motions and gas formation.	Rubram 30 TDS 6 hourly X 15 days
30/3/2019	Pain in abdomen becomes reduced. He started gluten food.	Rubram 30 TDS 6 hourly X 15 days
15/4/2019	Further pain becomes reduced with gluten diets.	Rubram 30 TDS 6 hourly X 15 days
30/4/2019	Abdomen pain again appeared with relieved in loose motions.	Pulsatilla Nigricans 200 1 dose EMES Rubram 30 TDS 6 hourly X 15 days
17/5/2019	Relieved in abdomen and loose motions.	Rubram 30 TDS 6 hourly X 15 days
6/6/2019	Improvement in all symptoms but legs pain becomes appeared.	Pulsatilla Nigricans 200 1 dose EMES Rubram 30 TDS 6 hourly X 15 days
25/6/2019	Legs pain still persists with vomiting in morning.	Pulsatilla Nigricans 200 1 dose EMES Rubram 30 TDS 6 hourly X 15 days
13/7/2019	Improvement in all complains with normal appearance of abdomen.	Rubram 30 TDS 6 hourly X 15 days
7/8/2019	Improvement in all complains with normal appearance of abdomen.	Rubram 30 TDS 6 hourly X 15 days
22/8/2019	Improvement in all complains with normal appearance of abdomen. The TTG-IgA became normal with gluten diets. TTG-IgA Level 0.29 U/ml on 22/8/2019	Rubram 30 TDS 6 hourly X 15 days



**LAB REPORT**

Patient Name: **CHAUHAN, ASHISH KUMAR**  
Age: **30 YEARS 3 MONTHS**  
Ref No: **107333**  
Ref Date: **22/08/2019**

Test Name: **TISSUE TRANSGLUTAMINASE ANTIBODY (tTG) IgA**

Result: **0.29** Units

Reference Range: **< 20** Units

Interpretation: **NEGATIVE**

**Comments:**

The enzyme tissue transglutaminase is widely distributed in human organs and is found in tissues surrounding smooth muscle and endothelial cells. It has been identified as the major autoantigen in celiac disease. This disease is a lifelong condition in which ingestion of gluten, the water insoluble wheat gliadin and the proteins in rye and barley lead to chronic inflammation and damage of the small intestinal mucosa. The disease is multifaceted in nature with clinical presentation ranging from perennating malabsorption to asymptomatic, silent and seronegative forms. Seronegative celiac disease is also known to be induced by gluten. tTG plays a role in extracellular matrix assembly and tissue repair mechanisms. In damaged tissue such as the small bowel mucosa of untreated celiac disease the tTG levels increase. IgA antibodies against tTG are highly disease specific serologic markers for celiac disease and seronegative celiac disease.

**End of Report**



**Dr. Lal Path Labs**

Lab No: **201834214** Age: **7 Years** Gender: **Male**  
Ref By: **Dr. D.L. GANGWAL**

Test Name: **TISSUE TRANSGLUTAMINASE (tTG) ANTIBODY, IgA, SERUM @ (U/ml)**

Result: **0.29** Units

Reference Range: **< 20** Units

Interpretation: **NEGATIVE**

**Comments:**

This test is used for the determination of IgA autoantibodies to human tissue transglutaminase for the differential diagnosis of Celiac disease / Gluten sensitive enteropathy (GSE). Celiac disease is characterized by small intestinal damages with flat mucosa leading to malabsorption with depletion of key nutrients. Tissue transglutaminase is one of the main endomysial autoantigens that can be easily detected for the diagnosis of Celiac disease. Other recommended tests are Endomysial, Gliadin & Retinulin antibodies along with small intestinal biopsy. Negative serology does not exclude a diagnosis of GSE. IgA deficiency should be considered in patients with suggestive clinical presentation.

**After Treatment**

**Comments:** Patient was improving symptomatic as well as investigation gradually during treatment. So, case may be considered as "improved one"

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