**Case-5 : abdominal pain: Student Handout**

**Part 1:**

Mrs. Fatima a 28-year old female visiting the Internist clinic at a community hospital complaining of lower [abdominal pain](http://en.wikipedia.org/wiki/Abdominal_pain), discomfort, bloating, and alternating diarrhea and constipation for the last 12 months. At present the pain is in lower abdomen and is exacerbated by meals and is relieved by defecation. She was prescribed by her family physician some tablets that also add to her relief. She also noticed whitish [mucus](http://digestive.niddk.nih.gov/ddiseases/pubs/ibs_ez/#7) in the stool. She worries why her abdomen remains bloated and swollen most of the time.

Her past medical history is not significant for any hospital admissions or surgeries and she is not known to have any allergies.

**Part 2:**

**General Examination** revealed:

Weight: 65 kg.

Height: 170.2 cm.

BMI:

Temp: 37.2˚C orally.

**Vital signs**

|  |  |  |
| --- | --- | --- |
| **Vital signs** | **Fatima**  | **Normal range** |
| Pulse rate | 100 regular | 60-100/min |
| Blood pressure | 120/80 mmHg | 100/60-120/80 mmHg |
| Temperature | 37.3 0C | 36.6-37.2 °C |
| Respiratory rate | 16 | 12-16/min |

Abdominal examination revealed soft lax abdomen, no organomegaly but tenderness over the lower abdomen on deep palpitation.

**Part 3:**

**Investigations:**

**Complete Blood Count**

|  |  |  |
| --- | --- | --- |
| Blood Test | Fatima  | Normal range |
| Haemoglobin | 10 g/100ml | 11.5-15.5 g/100ml |
| White blood cell count  | 8,000 mm3 | 5,000 -10,000 mm3 |
| MCV | 70 fl | 80-96 fl |
| Platelet count | 242,000 mm3 | 160,000-500,000 mm3 |
| Anti-TTG IgA | Normal  |  |
| Creatinine  | Normal |  |
| IgA level | Normal |  |
| TSH | Normal  |  |
| Fecal Calprotectin  | Normal  |  |
| ALT  | Normal  |  |
| ALP | Normal  |  |

Ultrasound abdomen: normal

**Learning objectives:**

At the end of the session the student should be able to;

1. Enlist the differential diagnosis of the abdominal pain that is associated with abnormal bowel habits experienced by the patient and identify all the most likely & less likely causes.
2. Justify the abnormal findings in the history and clinical examination.
3. How to diagnose celiac disease?
4. Name further investigations that are required for this patient.
5. How would you treat celiac disease?
6. Interpret “red flag” indicators that need to be investigated promptly.
7. When is colonoscopy indicated in such patient?
8. How Fecal Calprotectin helps in this patient evaluation?
9. Discuss the management of IBS that includes:
* Fibers
* Life style modifications
* Medications
1. Anti-diarrhoeal drugs (e.g.: loperamide)
2. For constipation: laxatives
3. Antispasmodic (e.g.: mebeverine)
4. Antidepressants

10. Describe the prognosis of IBS and celiac disease

**Instruction to the students:**

Please read the case carefully, individually or in the group before you are coming to the “Case based learning” session. Look at the objectives and try to fulfill these objectives. Prepare for the case well by referring to some suggested reading list. The tutor in CBL session will ask you to go through the case and answer some of his stimulating questions to ensure that you have achieved the objectives