

Case Report on Acute Gastroenteritis

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ABSTRACT: *Gastroenteritis, also known as infectious diarrhea, is an inflammation of the gastrointestinal tract characterized by vomiting, diarrhea and abdominal cramp. These symptoms are also accompanied by fever and overall weakness. Gastroenteritis typically lasts about three days. We present a case from hospital, which had Acute Gastroenteritis that managed after 8-day stay in hospital. By the proper management and therapeutic treatment, the patient was discharge after 8 days from hospital.*

KEYWORDS: acute gastroenteritis, diarrhoea, viruse

INTRODUCTION

Acute gastroenteritis (AG) is a most common disease in humans worldwide. The symptoms include signs and symptoms of diarrhoea, vomiting, nausea, abdominal cramps or pain, fever, and blood or mucus in the stool [1–5]. The wide variety of bacteria to protozoa and other parasites are responsible for AG. According to World Health Organization (WHO) Diarrhea is defined as having 3 or more loose or liquid stools per day or as having more stools than in normal for that person [6]. A wide range of virus, bacteria and parasites can cause diarrhea. In both developed and developing countries, viruses are the leading cause of acute diarrhea [7]. Nepal being a developing country, diarrheal diseases are major

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problem. Precise data on childhood mortality associated with diarrheal diseases in Nepal is not available. But in 2016/17, 1,184,120 cases of Diarrhoea were reported of which 0.44% suffered from severe dehydration (increased from 0.2% the previous year). The national incidence of diarrhoea per 1000 under-5 year olds decreased from 422/1000 in 2015/16 to 400/1000 in fiscal year 2016/17 [8]. The study aimed at understanding determinants of under-diagnosis by (1) estimating the incidence and burden of AG seen at the primary care level, (2) describing the physicians' case management (diagnostics, treatment) of AG patients and (3) estimating the work loss due to AG of cases presenting to a physician.

Case Presentation

A 42-year-old Female was admitted to the medicine ward, with Chief complains of loose stools (15-20 episodes), Vomiting multiple episodes, Pain abdomen in Rt. hypogastric region. The past medication history showed that she was diagnosed with Hypothyroidism but not taking medicine and social history showed non-alcoholic and non-smoker. From Laboratory finding she was diagnosed with AG, she was admitted to the medicine ward and starts the IV therapy. Observing the patient condition did treatment and patient was discharged after 8 days stay in medicine ward.

Physical Examination

General Examination: Patient was conscious

- Pallor (-ve)
- Icterus(-ve)
- Cyanosis(-ve)
- Clubbing(-ve)
- Edema (-ve)
- Dehydration (-ve)

Vitals:

- Pulse rate: 68/min
- Respiratory rate: 22/min
- BP: 110/70 mmHg
- Temperature: 98.0° F

Systemic Examination

- Respiratory system:NVBS, no added sound
- Cardiovascular system: Both the heart sounds are heard and murmur presents
- Central nervous system examination: Grossly intact

Investigations

HEMATOLOGICAL REPORT

- WBC: $5.0 \times 10^3/\text{cu.mm}$ (4000-11000)

- Haemoglobin: 10.5 gm/dl (13-17)
- RBC: 4.42×10^6
- Platelet: 159×10^3 /cumm (150-400)

Laboratory Investigation

- Urea: 19mg/dl (13 -43 mg/dl)
- S.creatinine :0. 7mg/dl (0.7 -1.3mg/dl)
- Sodium: 148meq/l (135-146)
- Potasium: 3meq/l (3.6-5.5)

Urine Analysis

- Protein: Nil
- Sugars: Nil
- Casts: Nil
- Crystals: NIL
- Pus cells: Nil
- Routine stool specimen tested positive for rotavirus antigen

Subjective evidence:-

- Patient presented to the hospital with 15-20 episodes of loose stool and Vomiting multiple episodes, Pain abdomen in Rt. hypogastric region.

Objective evidence:-

- Blood pressure: 110/70 mm Hg
- Temperature: Normal
- Respiratory Rate: 22 breaths/min
- Lab results revealed positive rotavirus antigen present in stool

Patient was admitted in the medicine ward for 8 days and during her treatment course following medicine were given to the patient.

Treatment**Table 1: Therapeutic management**

Drug Treatment Chart												
Drugs Information					DAYS							
S.N .	Generic Name	D o se	R T	F	1	2	3	4	5	6	7	8
1	Ceftriaxon e	1 g m	I V	BD	Y	Y	Y	Y	Y	Y	Y	Y
2	Metronida zole	5 0 0 m g	I V	TD S	Y	Y	Y	Y	Y			
3	Pantopraz ole	4 0 m g	I V	OD	Y	Y	Y	Y	Y	Y	Y	Y
4	Ondensetr on	4 m g	I V	TD S	Y	Y		Y	Y	Y		Y
6	Normal saline		I V	24 HR	Y	Y			Y			
7	Pro biotic	2 C A P	P O	TD S		Y			Y	Y	Y	

8	Secnidazole	2gm	PO	Stat			Y	Y	Y			
9	Hyocin butyl bromide	10mg	PO	TDS								
10	Loperamide	2mg	PO	SOS				Y	Y			
<p>Progress Chart/Investigations Others: Day first: G/C-Fair, PICCYED- Nill, PR-68bpm, BP-110/70mmHg, RR-22/min, Loose stool 15-20 episodes Day third: G/C- Fair, PR-52/min, RR-22/min, BP-110/60mmHg, Loose stool 10 episodes Day fifth Loose stool 3 episodes Day on discharge: F/C-Nill, PR-80/min, RR-18/min, BP-110/80mmHg, P/A-soft non tender</p> <p>After 8 day of admission the patient G/C good by observing that patient was discharged by giving following medication and advised to take plenty of water and soup.</p>												
<p>Discharge Medications:</p> <ul style="list-style-type: none"> ➤ T. Ornidazole 500mg PO BD 5 days. ➤ Cap. Pro biotic BD 5 days. ➤ T. Hyoscin butyl bromide 10mg TDS 3 days. ➤ T. Transamic acid 500mg PO TDS (during mensuration). 												

DISCUSSION

Acute gastroenteritis (AG) is a most common Globally occurring disease in humans. The symptoms include diarrhoea, vomiting, nausea, abdominal cramps or pain, fever, and blood

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or mucus in the stool [1–5]. The large species of Bateria, protozoa and parasites are responsible for occurring Acute Gastroenteritis. Diarrhea is defined as having 3 or more loose or liquid stools per day or as having more stools than in normal for that person by WHO [6]. A wide range of virus, bacteria and parasites can cause diarrhea. Viruses are the acute cause of Diarrhoea in both the developing and developed countries [7]. Our patient was came in the medicine ward due to the presence of various complain; 15-20 episodes of loose stool and Vomiting multiple episodes, Pain abdomen in Rt. hypogastric region. Early detection/diagnosis and appropriate management is extremely important in patients with AG. Severe diarrhoea may lead to high levels of fluid loss, which may ultimately be rendered life threatening among young children and adults. Acute gastroenteritis is associated with a high number of hospital admissions and high socioeconomic costs so that proper diagnosis and effective management is necessary.

In this case a 42 years female patient admitted to the medicine ward, presented to the hospital with 15-20 episodes of loose stool, multiple episodes of vomiting, pain in abdomen, Lab results revealed positive rotavirus antigen present in stool. She was diagnosed Acute Gastroenteritis so the patient was admitted to the medicine ward and started the treatment. She was stayed in the hospital for 8 days she was treated with Various medicine by using IV route mention in above table. The patient progressive condition/report was studied and discharged after 8 days from medicine ward. She was properly counseled to follow good personal hygiene and take plenty of juice and watery food. She was discharge by giving oral medicine, which was listed in the table above.

CONCLUSION

This case report of patient who presented with 42 years' female patient with Chief complain of loose stool for 15-20 episodes, multiple episodes of vomiting and pain in abdomen to Department of Medicine, Chitwan Medical College Bharatpur. She had diagnosed with AG, her medication history showed that she was previously diagnosed with Hypothyroidism but not taking any medicine, she was diagnosed by observing lab data and start the treatment. She was admitted to the medicine ward for 8 days and start the therapeutic management after that she was discharge by giving medicine with proper counseling. She was advised to follow good personnel hygiene and take plenty of watery food and juice.

AG is considered the main cause of severe dehydrating diarrhea. And is associated with a high number of hospital admissions and high socioeconomic costs so that early detection and proper diagnosis and management is necessary.

Declarations

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Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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