



The Study of Ways For Early Recovery or Shortening the Course of Acute Diarrhoeal Diseases

KEYWORDS

Acute diarrhoea, Racecadotril, Azithromycin, Parenteral ,oral ,anti micro bial therapy.

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ABSTRACT Diarrhoea is one of the main problem in our tertiary care hospital . Each year from march to October the diarrhoeal patients coming to infectious diseases department. Most patients are from low to middle socio - economic status . During the period 2015 - 1482 patients as outpatient(o.p). and 443 as in patients(i.p) and from january 2016 to may 2016 - 89 patients came as i.p. , 512 as op. visited the tertiary care hospital ,govt , general hospital , kurnool , motivated to this study for the earliest recovery from acute diarrhoeal diseases such as acute diarrhoea , dysentery , gastro enteritis .

All were explained regarding personnel hygiene , asked to take boiled and cooled water , thorough hand wash after toilet and food intake .

By 3 methods of approach we can shorten the duration and the severity of acute diarrhoea. Therefore avoiding prolonging diarrhoeal suffering by the patients , cost effective in o.p & i.p

Aim of the study : To study

1. The adjuvant effectiveness of Racecadotril .
2. The adjuvant effectiveness of Azithromycin (p.o) who are not responding to inj.ciprofloxacin and metronidazole alone.
3. parenteral vs oral antimicrobial therapy .
4. inj.ceftriaxone 1 gram i.v. bid . vs inj.ciprofloxacin.& metronidazole group.

Inclusion criteria :

Patients with watery diarrhoea .

Patients with passing of mucus stools with or without severe pain abdomen .

Patients who are not responding with i v fluids and ,inj.ciprofloxacin , inj.metronidazole by 2 days of treatment .

Exclusion criteria :

1. aged below 12 years not included in this study .
2. Racecadotril not used in dysentery cases .and those who are with thick mucous stools .
3. Pregnant women .
4. In view of drug induced QTc interval prolongation azithromycin not used patients Who have cardiac ailments .

Material and methods :

1. Racecadotril group vs control : in this 50 patients of watery diarrhoea selected from o.p. and i.p.25 pts. kept cap. Racecadotril 100 mg. 2 statum followed by 2 another 100mg doses at 8hrs interval, along with oral ciprofloxacin 500mg bid and metronidazole 400mg bid . 25 pts. control group not kept on racecadotril

2 .Group - inj.ciprofloxacin and metronidazole vs Adjuvant Azithromycin group :

25 patients who do not respond to ciprofloxacin and metronidazole combination by 24 to 48 hours and those who presented with severe pain abdomen kept added on oral Azithromycin 500mg once daily . 25 members kept inj.cip

rofloxacin & metronidazole alone .

3. Parenteral vs oral antimicrobial therapy : 25 pts. kept inj. ciprofloxacin and inj. Metronidazole parenteral rout and 25 kept pts. control group on oral rout of administration .

4. inj.ceftriaxone vs inj.ciprofloxacin and inj. Metronidazole

Results :

1. Racecadotril group vs control group : In racecadotril group 18 pts. responded well with early control of diarrhoea .Among non- racecadotril 10 people has short recovery. Addition of Racecadotril is a better option for early shortening the duration of recovery .

2. inj.ciprofloxacin and metronidazole vs Adjuvant Azithromycin group : in this group adjuvant Azithromycin added group 20 pts. got relief from colicky abdominal pain & dysentery by next 6 to 12 hours compared to 14 pts. with inj.ciprofloxacin and metronidazole group alone.

Thus addition of Azithromycin facilitated very good pain & shortening the duration of especially in dysentery cases .

3 . Oral vs parenteral rout anti microbial therapy group administration 20 out of 25 responded by short period control of diarrhoea with 6 to 12 hours with parenteral antimicrobial therapy compared to oral therapy in which only 14 pts. responded by short period control of diarrhoea .

4.inj.ceftriaxone vs inj.ciprofloxacin and metronidazole in both groups 12 and 13 respectively out of 25:25 patients .

	RCT	NRCT			PARENTERAL	ORAL
NO OF PTS	25	25	25	25	25	25
NO OF PTS RE-	18	10	20	14	20	14
RE-	<6-12	>12-48	<6-12	>12-48	<2-6	>12-48

RCT : racecadotril, NRCT: : no racecadotril ,CIP: ciprofloxacin, MET: metronidazole, AZT: azithromycin

Conclusions :

1. Adding racecadotril to antimicrobial therapy shortens the duration of diarrhoea especially in watery diarrhoea unless it is contraindicated. According to duardos alazar lindo et al. racecadotril is an effective and safe treatment for acute diarrhea in adults and children in the treatment of acute watery diarrhoea. An overall 33% decrease of sick days. Racecadotril in the treatment of acute diarrhoea in adults add on racecadotril to intravenous rehydration therapy acutely reduces stool frequency. In our study 18 out of 25 in racecadotril group respond earlier by 6 to 12 hours recovered compared with those not kept on racecadotril their diarrhoea prolonged in 3 to 5 days in 14 out of 25 patients.

2 . Adjuvant Azithromycin vs inj .ciprof. & metronidazole group :

Adding of oral Azithromycin 500mg o.d. pts. have very good response especially dysentery cases. Azithromycin for the self treatment of travellers diarrhoea 500 mgs single dose where the principle pathogen was fluoroquinolone - resistant *Campylobacter* spp. In our study 500mg of azithromycin used as adjuvant who are not responding to ciprofloxacin and metronidazole combination 20 recovered out of 25 in dysentery related and loose stool cases. Azithromycin, 500 mg per day for 1–3 days, appears to be effective in most cases of travellers diarrhoea.

3. oral vs parenteral rout anti microbial therapy group :

Parenteral therapy of antimicrobial therapy tremendously decreased hospital stay by 4 to 12 hrs. short period of recovery. Even a single parenteral dose of ciprofloxacin. & metronidazole effective in reducing the course of diarrhoea. Both parenteral and oral antimicrobials has equally efficient. In parenteral therapy the bio availability is more with parenteral drug administration as per centre for paediatric clinical effectiveness, patients out comes hospital of Philadelphia.

Discussion : racecadotril is a Enkephalinase inhibitor used for acute diarrhoeal diseases for adults and children over 3 months of age. available as capsules and granules. Judicious use of Racecadotril. Adding Adjuvant Azithromycin (like dual antihypertensive drugs) having dual action benefit. Parenteral anti microbial therapy facilitates (even a single dose), shortens the course of diarrhoea by less than 48 hour hospital stay. Thus giving better out come of the patient. We observed more nausea and vomiting effects with inj.ceftriaxone usage especially with 10-20 ml diluent compared to 100ml normal saline.

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