

Open-Label RCT in patients admitted with acute severe UC. Randomisation to: standard of care or EEN (semi-elemental formula) for 7 days.

All of them with IV steroids

**Primary endpoint:** Corticosteroid failure, defined by the need for salvage medical therapy or colectomy.

Fecal microbiota analysis was done at day 1 and 7.

#### Results:

- Corticosteroid failure: EEN 25% vs standard of care 45%, (ITT p=0.051, PP analysis p=0.04)
- No differences in colectomy rate.
- Patients on EEN had shorter hospital stay, p=0.04, higher albumin p<0.01, greater reduction of CRP and faecal calprotectin levels both p=0.04.
- EEN group lower composite outcome colectomy/hospitalisation at 6 months, 16% vs 39%, p=0.045

#### Conclusions:

EEN for 7 days may augment corticosteroid responsiveness in patients with ASUC.

TABLE 3 Comparison of treatment outcomes between EEN and SOC group

Intention to treat analysis			
	Exclusive enteral nutrition (EEN) (n = 32)	Standard of care (SOC) (n = 30)	P value
Steroid failure	8 (25%)	13 (43%)	0.051
Colectomy	3 (9%)	4 (13%)	0.41
Response to rescue medical therapy	4/5(80%)	10/12 (83%)	0.72
Duration of hospitalisation (days)	10 (8-17)	13 (8-24)	0.04
Adverse effects	7(22%)	4(13%)	0.08
Per protocol analysis			
	EEN group (n = 27)	Standard of care (SOC) group (n = 30)	P value
Corticosteroid failure	5 (19%)	13 (43%)	0.04
Colectomy	2 (7%)	4 (13%)	0.32
Response to rescue medical therapy	3/3(100%)	10/12 (83%)	0.41
Duration of hospitalisation (days)	9 (7-16)	13 (8-24)	<0.01

Note: Values provided as mean ± standard deviation, median (IQR) or n (%) as appropriate.

TABLE 4 Inflammatory markers and biochemical parameters during treatment

	EEN group (n = 32)	Standard of care (SOC) group (n = 30)	P value
Day 7 haemoglobin (g/L)	99 ± 18	97 ± 12	0.91
Day 7 protein (g/L)	64 ± 7	58 ± 7	<0.01
Day 7 albumin (g/L)	34 ± 4	29 ± 3	<0.01
Day 5 CRP (mg/L)	5.7 (1.1-39.3); n = 27	11.7 (4.3-55.4); n = 26	0.03
Delta CRP (day1-day5) (mg/L)	23.4 (6.8-38.9)	11.4 (1.9-25)	0.04
Day 3 CRP (mg/L)	10.1 (1.3-54.1)	12.8 (1.2-77.2)	0.13
Day 3 ESR (mm/h)	34 ± 11.5	37 ± 12.5	0.41
Day 3 FCP (µg/g)	720 (415-1126); n = 28	1103 (676-1552); n = 29	0.03
Delta FCP (day1-day3) (µg/g)	315 (129-797)	140 (-386-459)	0.04

