

Observational retrospective cohort.

Patients with CD induced with EEN for their first flare and followed-up for 12 months.

EEN for 6-8 week period, after that food introduced according to local protocol.

Exclusion criteria: use of steroids at induction or antiTNF or those treated with EEN in successive flare-ups.

Primary endpoints: rate of remission after induction with EEN in newly diagnosed CD children.

Results:

- Clinical remission after EEN, 83% patients.
- Patients with wPCDAI < 57.5, FC < 500, CRP > 15 mg/L and ileal involvement tended to respond better to EEN.
- EEN was longer 8 (7-8.7) vs 7.7 (4.6-8.1) in those who achieved remission, $p=0.019$

Conclusion:

EEN administered for 6-8 weeks is effective for inducing clinical remission. Due to high response rate, EEN should be used as first-line therapy in luminal pediatric CD regardless of disease location and activity.

Predictors of Response to Exclusive Enteral Nutrition in Newly Diagnosed CD in Children: PRESENCE Study from SEGHP

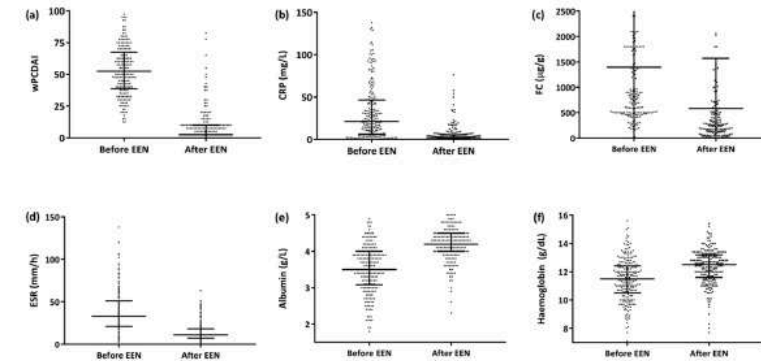


Figure 1. Progression of the activity index and biochemical parameters after the EEN period ($n = 222$). (a) wPCDAI [52.5 (IQR 39–67) vs. 2.5 (IQR 0–10), (Δ wPCDAI -44 ± 20 $p < 0.0001$]. (b) CRP [21 (IQR 6–47) vs. 2 (IQR 1–5), $p < 0.0001$]. (c) FC [830 (IQR 500–1800) vs. 256 (IQR 120–585), $p < 0.0001$]. (d) SS [33 (IQR 21–51) vs. 11 (IQR 7–18), $p < 0.0001$]. (e) Albumin [3.5 (IQR 3–4) vs. 4.2 (IQR 4–4.5), $p < 0.0001$]. (f) Haemoglobin [11.5 (IQR 10.5–12.4) vs. 12.5 (IQR 11.6–13.2), $p = 0.0001$]. Abbreviations: CRP, C-reactive protein; FC, faecal calprotectin; wPCDAI, weighted Paediatric Crohn's Disease Activity Index; EEN: exclusive enteral nutrition.

Table 3. Predictive variables of response to EEN. Multivariate analysis. Dependent variable: wPCDAI < 12.5. $n = 222$ patients.

Variable	Univariate OR (CI 95%)	p	Multivariate OR (CI 95%)	p
wPCDAI ≤ 57.5	2.7 (1.2–6.0)	0.013	3.8 (1.5–9.7)	0.005
FC < 500 $\mu\text{g/g}$	5.5 (1.2–24.3)	0.022	6.9 (1.3–35.4)	0.019
CRP > 15 mg/L	1.4 (0.7–3.0)	0.306	2.6 (1.01–6.8)	0.047
Ileal involvement	5.1 (1.0–26.5)	0.049	6.3 (1.09–36.6)	0.039

Hosmer and Lemeshow test: $p = 0.962$; Cox-Snell R^2 : 0.130. Nagelkerke R^2 : 0.202; Sensitivity: 96 (91–99); Specificity 23 (10–42); PPV: 82 (75–89); NPV: 64 (31–89). Note: This table only shows the results of the univariate analysis of the variables that were finally included in the multivariate analysis. The model displayed here is significant, explains between 0.130 and 0.202 of the dependent variable, and correctly classifies 81% of cases.

