



European
Crohn's and Colitis
Organisation

Disease activity patterns during the first 5 years after diagnosis in children with ulcerative colitis: a population-based study

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Copenhagen, March 7, 2019



Conflict of interest: none

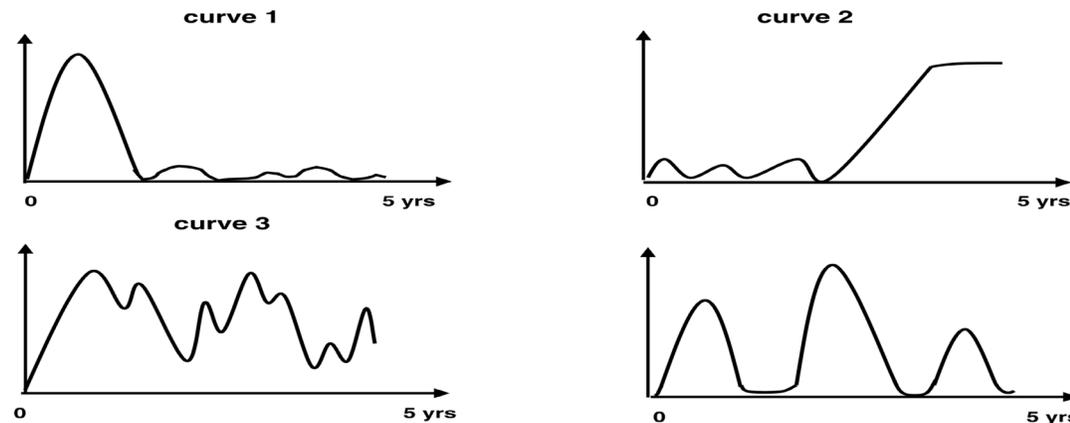


Background and Aims

- ❖ **Background:** Real-life data on long-term disease activity of pediatric UC are lacking.
- ❖ **Primary outcome:** to define clusters of disease activity of pediatric UC in a population-based inception cohort during the first 5 years after diagnosis.
- ❖ **Secondary outcome:** to identify prognostic risk factors based on findings at the diagnosis and in the first 6 months after.

Material and methods

- All UC patients from SIGENP IBD registry and a complete follow-up of at least 5 years were included.
- An **Active disease** was defined for each yearly semester as follows:
 - clinical activity (PUCAI>35); endoscopic activity (Mayo>1); need for hospitalization, surgery or treatment escalation.
- Formula-based clusters were then generated based on previously published questionnaire-based activity patterns in adults* (competed with 1 more).



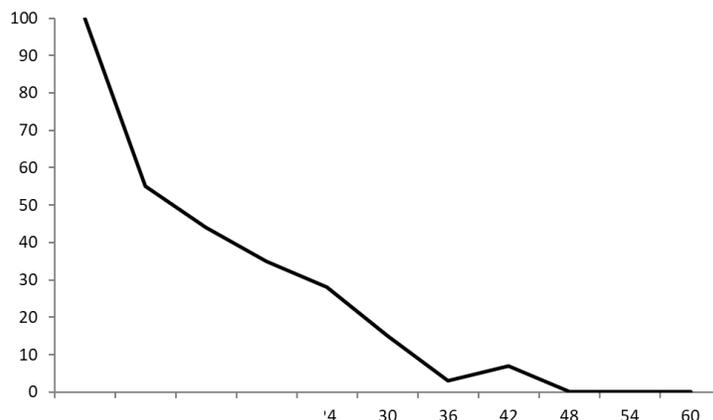
- Clinical, endoscopic and laboratory prognostic factors of disease course were identified at diagnosis and at 6-month follow-up.



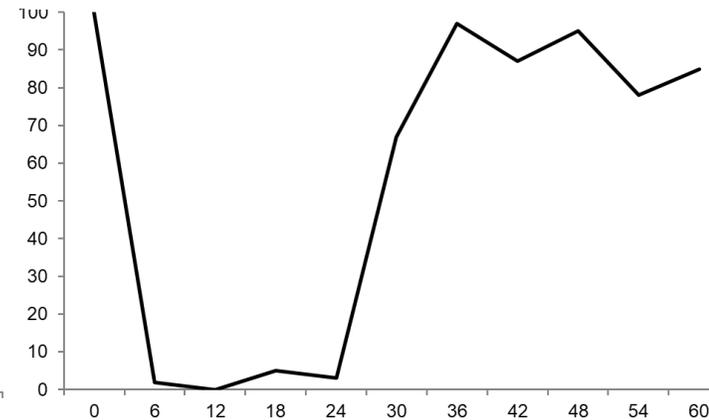
Results: clusters of activity

226 pts included:
127 (48%) E4
29 (13%) E3
24 (14%) E2
36 (16%) E1

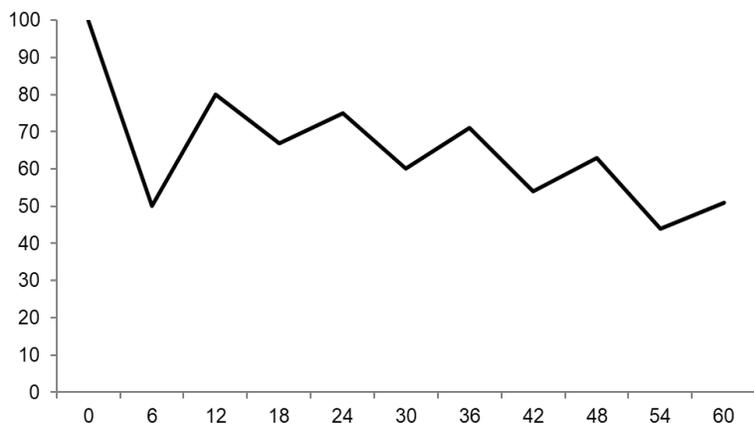
N = 54/226 (24%)
Cluster A: ACTIVE TO REMISSION



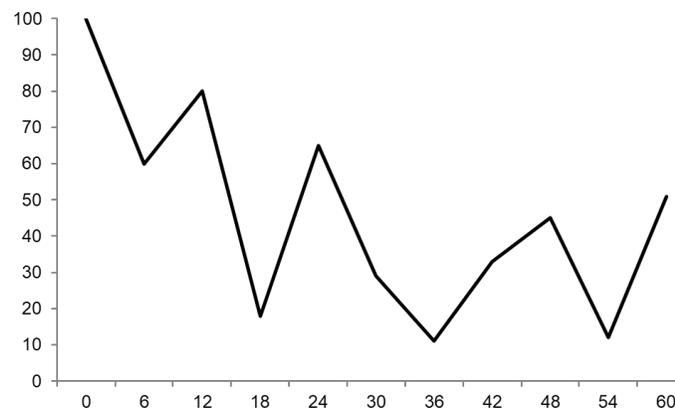
N=24/226 (11%)
Cluster B: REMISSION TO ACTIVE



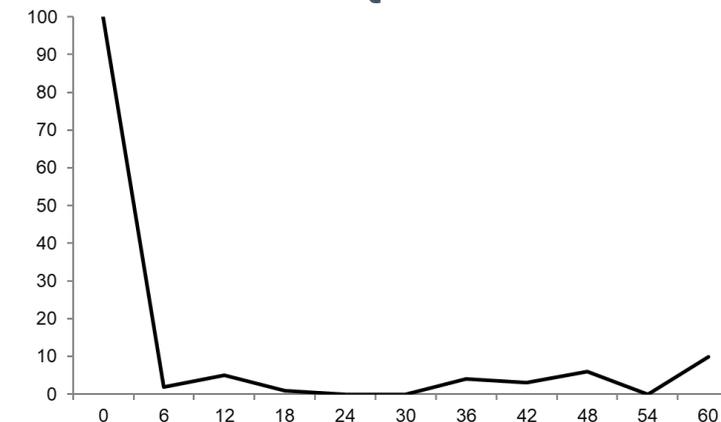
N=42/226 (19%)
Cluster C: MODERATE-SEVERE CHRONICALLY ACTIVE



N= 31/226 (14%)
Cluster D: CHRONIC INTERMITTENT



N=75/226 (33%)
Cluster E: QUIESCENT



- **CLUSTER A: 2 sem of activity in the first 24 m, <2 sem of activity from 25 to 60 m**
- **CLUSTER B: <2 sem of activity in the first 24 m, >2 sem of activity from 25 to 60 m**
- **CLUSTER C: ≥1 sem of activity per year**
- **CLUSTER D: ≥1 sem of activity every 2 years or an irregular chronic-intermittent, inactive-active-inactive or viceversa pattern**
- **CLUSTER E: <2 sem of activity in total**

- ❖ A high CRP (OR 3.79; 95% CI 1.28-11.2) and platelet count (OR 3.41; 95% CI 1.17-9.93) at the diagnosis were positively associated with a chronically active disease at follow-up (Cluster C).
- ❖ An endoscopic recurrence at 6 months was negatively associated with a quiescent course (Cluster E) (OR 0.37; 95% CI 0.13-0.96).
- ❖ 8% of patients needed surgery at the end of the follow-up, none in the quiescent group ($p=0.04$).

Conclusions

- More than one third of pediatric patients with UC present a chronically active or chronic intermittent disease course during the first 5 years after the diagnosis.
- About 30% of patients experience a disease flare at the diagnosis followed by a quiescent disease course in the next 5 years of follow-up.
- High inflammatory markers at the diagnosis and a persistent endoscopic activity seem to correlate with a worse disease course.