

Tubo Digestivo

CO-021 - RISK FACTORS ASSOCIATED WITH FAMILIAL INFLAMMATORY BOWEL DISEASE (IBD)

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Introduction: A family history of IBD is the strongest risk factor for disease. Despite sharing genetics and the same environment, some first-degree relatives (FDRs) will develop disease, while others will not. **Methods:** Retrospective population-based case-control study using the Danish National Patient Register (01/1977-12/2017), including families with ≥ 2 affected FDRs. Firstly, we compared IBD siblings with unaffected siblings within the same family (within-family analysis). Secondly, we compared IBD and their unaffected IBD relatives between all families (between-family analysis). Variables studied: sex, birth order, mode of delivery, antibiotics, personal and family history of immune-mediated diseases, infections, and surgical history preceding diagnosis. Analysis: Uni- and multivariate conditional logistic regression. **Results:** "Within-family analysis": 1669 families included (2,447 cases/1,732 controls). Female gender, and prior history of ankylosing spondylitis were associated with higher risk of IBD (Table 1). Exposure to antibiotics, broad or narrow spectrum, increased the risk for IBD, with a dose-risk relation. "Between-family analysis": 1,254 cases and 37,584 controls were included, confirming prior results. Additionally, having more relatives or a sibling with IBD also increased the risk. (Table 1) Appendectomy was protective factor for UC development. **Conclusion:** In families with ≥ 2 FDRs with IBD, we identified several risk factors for the unaffected FDR to develop disease. These findings provide an opportunity for counselling IBD relatives and for close follow-up of those unaffected FDRs at higher risk.

Variable	Within-family (aOR, 95% CI)	Between-family (aOR, 95% CI)
Gender	1,40 [1,23-1,59]	-
Ankylosing spondylitis	2,80 [1,05-7,91]	3,92 [1,38-11,12]
Antibiotic treatment	1,28 [1,02-1,62]	1,29 [1,04-1,60]
Narrow spectrum antibiotic treatment	1,32 [1,12-1,55]	1,26 [1,05-1,52]
Broad spectrum antibiotic treatment	1,30 [1,08-1,56]	1,54 [1,35-1,75]
Each additional antibiotic treatment (≥ 5)	-	1,42 [1,04-1,90]
FDR with IBD (sibling vs parent)	-	1,36 [1,18-1,57]
FDR IBD phenotype (UC vs CD)	-	0,79 [0,69-0,90]
Number of relatives with IBD (>2)	-	2,47 [1,86-3,28]

Number of relatives with IBD (> 3)	-	6,26 [1,34-29,29]
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Table 1 – Multivariate conditional logistic regression.