



CHRONOGRAPHY OF INFLAMMATORY BOWEL DISEASE

Year 1983: Smoking decreases the risk of ulcerative colitis[☆]



Año 1983: el tabaquismo disminuye el riesgo de colitis ulcerosa

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The relationship between smoking and ulcerative colitis is a well demonstrated fact today. In fact, stopping smoking is one of the environmental factors with the strongest causal relationship with the onset of ulcerative colitis. But in 1982, this relationship had not yet been elucidated. In 1983, two epidemiologists from the Boston University Hospital read with interest the “signals” in the form of cohort studies and clinical cases published that same year by various authors who found that smoking seemed to have a protective effect against the onset of ulcerative colitis. These data stimulated them to review the information from two large epidemiological studies that had been coordinated by their site in patients admitted to their hospital or hospitals from other countries about health habits,

including smoking. Their results found solid evidence of the negative association between smoking and the prevalence of ulcerative colitis. It is not odd that this paper would be published in the “*Medical Intelligence*” section that existed at the time in the journal where the paper was published. What they could not confirm was the causality of said association (recalling the 9 Bradford Hall criteria), leaving their conclusions suspended pending the existence thereof, hoping that using nicotine in future studies would reverse ulcerative colitis. Later studies have corroborated the inverse relationship between smoking and ulcerative colitis, but have not demonstrated that administration of nicotine is an effective method of managing these patients. We must not forget that tobacco contains hundreds of chemical products that could be participating in this relationship.

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Cigarette smoking and ulcerative colitis

Jick H, Walker AM. N Engl J Med. 1983 Feb 3;308(5):261-3

1983: Smoking decreases the risk of ulcerative colitis



Various studies and published cases led to a review of the relationship between smoking cigarettes and ulcerative colitis.



Two large studies conducted by The Boston Collaborative Drug Surveillance Program were reviewed.

Negative smoking-ulcerative colitis association in both studies.

Study	1 (N = 45,000)	2 (N = 25,000)
Location	7 countries	Boston
History of smoking	<ul style="list-style-type: none"> • Never • Former (more than 1 year) • Current (1/2 pack/day, 1 pack/day, ≥ 2 packs/day) 	
Control (4 per patient)	Age (5 year intervals), sex and nationality	Age (5 year intervals) and sex
Ulcerative colitis	158	81

N = 956
N = 239



Estimate of the rate of prevalence of ulcerative colitis compared to non-smokers

"Current" vs "former":

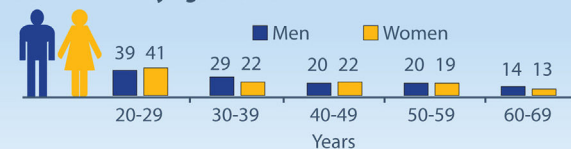
- One third of the risk in "current" versus "former".
- Prevalence indistinguishable between "former" and "never".

Current smoker by age: low risk in all groups, but with no trends.

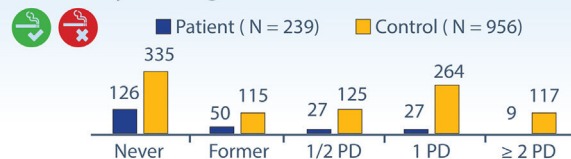
By sex-number of packs:

- \downarrow higher risk in men than women.
- In both, the "dose-response" curve flattens at ≥ 1 PD.

Distribution by age and sex



Distribution among total number of cases and controls by smoking status



Conclusions

- 1 Solid evidence of a negative association between smoking and prevalence of UC.
- 2 Most obvious non-causal explanation: patients with UC avoid smoking; however, this does not explain the lack of association with UC and prior smoking.
- 3 The causal association between smoking and reduced risk of UC continues to be very speculative.
- 4 Do patients with UC who smoke die young, introducing a false appearance of a protective effect of smoking?
- 5 If there is a rapid and reversible effect of nicotine on UC, there would be more direct evidence available in the form of simple intervention studies.

Abbreviations: UC, ulcerative colitis; PD, packs per day.