

POSTER PRESENTATION

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# Colorectal cancer risk in patients with inflammatory bowel disease and Lynch syndrome

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## Background

Chronic inflammatory bowel disease (IBD) and Lynch syndrome (LS) are associated with an increased risk for developing colorectal cancer (CRC). After 8-10 years of pan-ulcerative colitis (DC), the risk of CRC is 2%, increasing by 0.5-1.0% annually. LS has been associated with a 60-80% lifetime risk of CRC. It is unclear whether individuals diagnosed with both IBD and LS would have a cumulative risk or earlier age of onset of CRC based on their diagnoses.

## Method

Patients with IBD and a germline mismatch repair gene (MMR) mutation were identified through the Familial Gastrointestinal Cancer Registry at Mount Sinai Hospital in Toronto, Canada. Information on their IBD diagnosis,

colorectal screening/surgery, medication use, family history and genetic test results were collected (Table 1).

## Results

Five of 329 (1.5%) individuals with germline MMR mutations reported having a history of IBD.

## Conclusions

Concurrent IBD and LS did not appear to predispose to early-onset CRC in our small case series.

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**Table 1**

Case #	1	2	3	4	5	
Gender	M	F	F	M	F	
Ethnicity	Caucasian	Jewish	Caucasian	Caucasian	Caucasian	
MMR Mutation	MLH1	MSH2	MSH2	MSH2	MSH6	
Age of IBD dx	27	20	27	32	23	
Site of IBD	Ileum	Pancolitis	Pancolitis	Proctitis	Pancolitis	
Colectomy, age	21	57	43	44	63	
Cancer/dysplasia	CRC dx 21	LGC*	None	TVA/HGD** dx 44	Endometrial dx 57	
Smoking hx	N	Y	N	Y	N	
IBD medication						
5-ASA	N	Y	Y	Y	Y	
Steroids	N	Y	Y	N	Y	
Antibiotics	N	Y	Y	Y	N	
Age of CRC in 1 <sup>o</sup> or 2 <sup>o</sup> kin	# of kin	2	3	2	4	5
	Mean age	40.5	30.7	35.5	49.7	78.4

\*LGD – low-grade dysplasia on random screening biopsy

\*\*TVA/HGD – tubulovillous adenoma with foci of high-grade dysplasia

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