

## #201 - SERRATED COLONIC POLYPS: PREDICTORS OF DYSPLASIA IN A CASE-CONTROL CHILEAN STUDY

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**Background:** Serrated lesions (SL) have emerged as significant contributors to colorectal neoplasia, challenging traditional adenoma-centric screening and surveillance strategies. Identifying predictors of dysplasia in serrated colon polyps is crucial for early detection and improving patient outcomes. In Chile, limited research has been conducted to investigate the endoscopic predictors of dysplasia in SL.

**Aim:** Identify potential endoscopic predictors of dysplasia in SL

**Methods:** Matched case control study of patients with SL with or without dysplasia by sex obtained from a retrospective cohort who underwent colonoscopy between April 2015 and May 2023 at Red de Salud UC-CHRISTUS, Santiago, Chile. Only patients with SL were included in the cohort. Demographic, clinical and endoscopic data was obtained from clinical records. Endoscopic characteristics examined included polyp size, location, morphology and the resection technique.

**Results:** 56,203 colonoscopy were performed, identifying serrated polyps in 1401 of them (SL detection rate of 24.9-per-1000 colonoscopy). A sample of 306 patients were included in the study (mean age 62.9 years (range 29-101)). Patient's characteristics and polyp size by dysplasia are presented in table 1. The average polyp size was 1.85 (1-13) mm, and it was statistically bigger in dysplasia ( $p=0.0459$ ). Polyp by location: 50%( $n=153$ ) ascending, 24.5%( $n=75$ ) transverse, 13.4%( $n=41$ ) descending and 24.8%( $n=76$ ) sigmoid colon, and 23.9%( $n=73$ ) were observed in rectum. Logistic regression by location adjusted by age and sex is presented in table 2. Sigmoid colon was statistically associated with less dysplasia ( $p=0.003$ ), as well as female patients ( $p=0.003$ ). Age was statistically associated with dysplasia ( $p=0.002$ )

**Conclusion:** Dysplasia exhibited a positive correlation with advanced age and a higher prevalence among women. The presence of polyps in sigmoid colon demonstrated a protective effect, reducing the likelihood of dysplasia. A significant association was observed between larger polyp and dysplasia

Baseline patient's characteristics	No dysplasia	Dysplasia	p value <sup>†</sup>
Age, median [IQR]	61 (51-69)	66 (56-75)	<b>0.0013</b>
Smoking, n [%]	35 (22.9%)	46 (30.1%)	0.154
Alcohol consumption, n [%]	40 (26.1%)	54 (35.3%)	0.083
Diabetes mellitus, n [%]	14 (9.2%)	19 (12.4%)	0.357
Cirrhosis n [%]	3 (2%)	6 (3.9%)	0.310
Hypertension n [%]	52 (34%)	58 (37.9%)	0.475
Gastric cancer, n [%]	1 (0.65%)	3 (1.96%)	0.314
Colorectal cancer, n [%]	10 (6.5%)	13 (8.5%)	0.515
Inflammatory bowel disease, n [%]	3 (2%)	2 (1.3%)	0.652
Familial colorectal cancer history, n [%]	34 (22.2%)	28 (18.3%)	0.393
<b>Polyps</b>			
Size, median [IQR]	1 (0.5-0.8)	1.5 (0.5-0.8)	<b>0.0459</b>

<sup>†</sup> Chi square for categorical variables and Wilcoxon signed-rank test for numerical variables. IQR: interquartile range

Table 1: Baseline patient's characteristics and polyps size

Location <sup>b</sup>	Dysplasia	p value
Ascending colon, OR (95%IC)	Ref.	Ref.
Transverse colon, OR (95%IC)	0.86 (0.38-1.97)	0.730
Descending colon, OR (95%IC)	1.69 (0.67-4.29)	0.268
Sigmoid colon OR (95%IC)	0.36 (0.19-0.72)	<b>0.003</b>
Rectum, OR (95%IC)	0.80 (0.43-1.47)	0.473
Female, OR (95%IC)	0.48 (0.30-0.78)	<b>0.003</b>
Age, OR (95%IC)	1.03 (1.01-1.05)	<b>0.002</b>

Logistic regression using ascending colon as reference group, adjusted by age and sex, with 95%IC. CI: confidence interval, OR: odds ratio

Table 2: Location