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## A retrospective analysis of colorectal polyps

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### Abstract

**Background:** A polyp in the colon is a growth that sticks out from the normally flat lining of the colon into the lumen. Most of the time, polyps don't cause any symptoms, but they can bleed and ulcerate and may also cause abdominal pain.

**Method:** This study investigates the colonoscopies conducted at tertiary care hospitals which were analyzed retrospectively. Patients were referred to the hospital for various reasons such as anemia, weight loss, abdominal pain, gastrointestinal bleeding, and colon cancer screening. The polyps were characterized based on their size, histology, and anatomical distribution. This analysis utilized a sample of 600 individuals, consisting of 350 men and 250 women, who had undergone colonoscopic polypectomies.

**Result:** Even though the study wasn't aimed at screening in particular, it did show that a lot of the adenomas and carcinomas in the people in the study group were found near or proximal to the splenic flexure. This means that a colonoscopy that only looks at the splenic flexure probably would miss 24% of the polyps and most of the carcinomas, assuming there are no problems on the left side. The study's results are similar to those of other published sets. The American Veteran's Affairs did a study that looked at how often and where advanced intestinal neoplasms were found in people who had a screening colonoscopy but had no symptoms.

**Conclusion:** The study has demonstrated that colonoscopy can effectively detect and cure a substantial amount of adenomas and carcinomas. A considerable percentage of tumors are located in proximal to the splenic flexure.

**Keywords:** Analysis, colorectal polyps, splenic flexure, colonoscopy

### Introduction

Colorectal cancer (CRC) has a big impact on the health of people. Men get cancer four times more often than women do. A person has a 5% chance of getting the disease at some point in their life [1-3]. Through the adenoma-carcinoma cycle, adenomas are known to be the main cause of 60–90% of cancer cases. Most of the time, this change happens slowly, over the course of ten to fifteen years. Colonoscopic polypectomy can stop CRC by stopping the growth of polyps into cancer [2-4].

Colorectal cancer should be screened for everyone above the age of 50 years and at early age in those with family history. Most of the patients may be asymptomatic and still have precancerous changes. In this case, colonoscopy is thought to be the most sensitive method. Colonoscopy for polyps has been shown in multiple cohort studies and controlled clinical trials to lower the risk of the colon cancer by 76 to 90% compared to the general population. Colorectal adenomas are the most common type of tumor found in people over 50 during both regular and diagnostic colonoscopies [3-5].

The type of noncancerous polyp is called a hyperplastic polyp or diminutive polyps these are tiny polypoid tumors or masses made up of normal cells that might be hard to tell apart from adenomatous polyps. Their cross-sectional histology look is unique, and they don't show any signs of dysplasia. Most of the time, hyperplastic polyps are smaller than 5 mm and are found in the left colon [4-6]. They almost never turn into colon cancer. A number of studies have looked at how likely it is for people with distal hyperplastic polyps to develop proximal neoplasms. The results of a large study that looked at 18 studies showed that between 21% and 25% of people who had a distal hyperplastic polyp also had a proximal tumor. IBD inflammatory pseudopolyps are bumpy areas of healthy intestinal mucosa that form when the mucosa ulcerates and heals itself during inflammatory bowel disease. The polyps are usually many and spread out in the

colitic area of the colon [5-7].

The size and histological traits of colonic adenomas are the main things that determine whether they will turn into cancerous growths. Adenomas with villi make up about 5 to 15% of all adenomas. One thing that makes these polyps stand out is that they have long glands that go from the surface to the center. It is necessary for an adenoma to have at least 75% villous makeup in order to be called villous. About 5 to 15 percent of all adenomas are tubulovillous adenomas, which are made up of 26 to 75 percent villous tissue [6-8]. Sessile polyps are connected to the colon wall at their base, while pedunculated polyps are not attached to the wall but have a mucosal stalk that goes through them. Adenomatous polyps can be put into three groups based on how likely they are to turn into cancer: low-risk, moderate-risk, and high-risk. Once a lesion is bigger than 1 cm, has villous tissue, or shows high-grade dysplasia, it is thought to have advanced [7-9].

**Material and Methods**

The purpose of this study is to perform a retrospective analysis of the colonoscopic polypectomies done at tertiary care hospital. Patients were referred for various reasons, including anemia, weight loss, abdominal pain, gastrointestinal bleeding, and

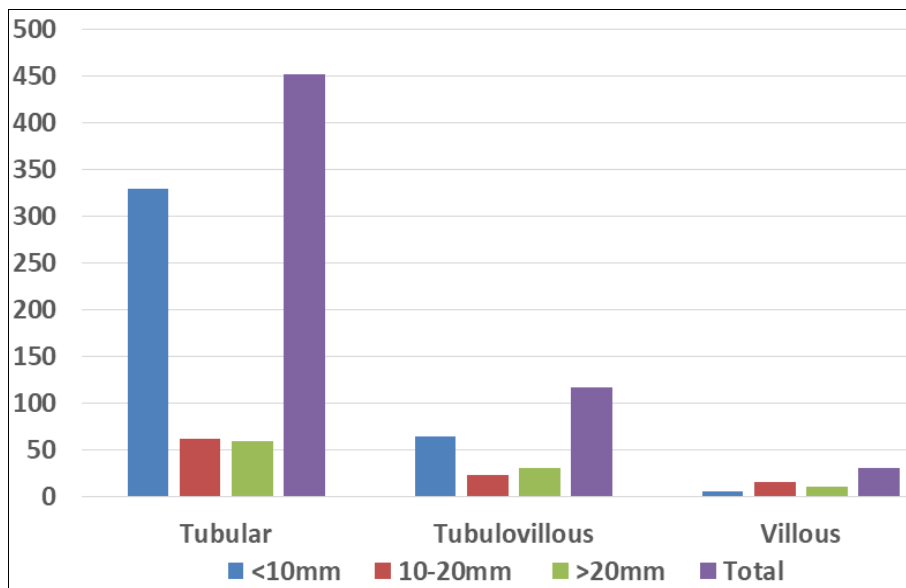
screenings for colon cancer. Before doing polypectomies, the gastroenterologists at this clinic did a full colonoscopic check. Two experienced pathologists then looked at the samples under a microscope. The tumors were categorized by their size, histology, and location. The study looked at a group of 600 people who had colonoscopic polypectomies. There were 350 men and 250 women in the group.

**Results**

Colonoscopy and polypectomies were performed on 600 people, 350 of whom were men and 250 of whom were women. The patients were, on average, 55+/-3 years old. A small number of the cases were older than 75, but most were between the ages of 50 and 61. Looking at the medical records showed that 200 of the cases had a proven family history of colon cancer.

**Table 1:** Adenoma frequency and histological type in relation to colon polyp size

Sr. No.	Histological type	<10mm	10-20mm	>20mm	Total
1	Tubular	330	62	60	452
2	Tubulovillous	64	23	30	117
3	Villous	6	15	10	31
4	Total	400	100	100	600



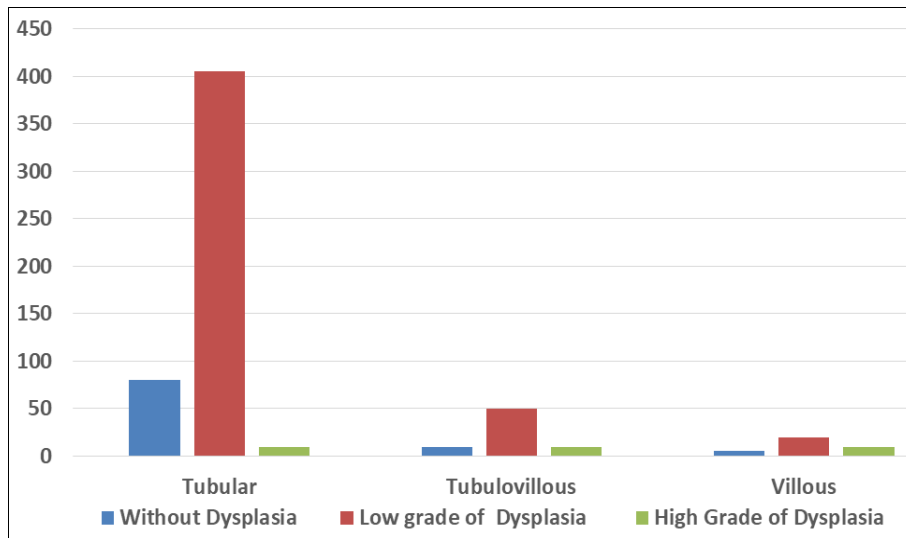
**Fig 1:** Adenoma frequency and histology vs. colon polyp size

Figure 2 and Table 2 show the dysplasia that was seen in different kinds of adenomas. It has been found that dysplasia is

more common in people with villous type.

**Table 2:** Dysplasia in different kinds of adenomas

Sr. No.	Histological type	Without Dysplasia	Low grade of Dysplasia	High Grade of Dysplasia
1	Tubular	80	405	10
2	Tubulovillous	10	50	10
3	Villous	5	20	10
4	Total	95	475	30



**Fig 2:** Dysplasia in different kinds of adenomas

Table 3 shows the exact number and proportion of cancerous polyps as a share of all polyps, broken down by where they are located in the body. There was no link between where a polyp was found and how likely it was to be cancerous.

### Discussion

The study's goal was to find out exactly where in the body intestinal polyps were found and what kinds of changes they had over ten years. The patient's endoscopic records were looked at to find out where the polyps and tumors were and what kind of tissue they were made. Out of the 600 adenomas, 350 were located on the sides and 250 were located on the top. Eighty polyps were found in the rectum, ninety in the sigmoid, one hundred and fifty in the descending colon, one hundred and thirty in the transverse colon, and forty in both the ascending and descending colon [8-10].

Additionally, our study wasn't meant to be a screening study, but it was clear that a lot of the adenomas and carcinomas in our study group are located proximal to the splenic flexure. Because of this, a colonoscopy that only looks upto splenic flexure probably miss about 24% of the polyps and most of the carcinomas, assuming the left colon is normal. The study's results are similar to those of other published sets [9-11]. The American Veteran's Affairs did a study that looked at how often and where advanced intestinal neoplasms were found in people who had a screening colonoscopy but had no symptoms. 35% of the people who took part in the study had an invasive cancer, a villous adenoma, or an adenoma.

To sum up, our research agrees with what other recent studies from around the world and in our own country have found about the age, sex, and site of colorectal polyps [12-14].

Our study showed that tubulo-villous adenoma was the most common histological subtype, even though tubular adenoma has been named the most common subtype in both recent and older texts. We found a strong link between having high grade dysplasia and the growth of polyps, the tubulo-villous/villous subtypes of adenomata, and left-sided polyps. This link was found in both new and old research [15-17]. However, our finding of a strong link between being female and having high degree dysplasia has not been reported in any other research [18-21]. Our research shows that, with a few small exceptions, the type and location of colorectal polyps in the region are mostly the same as what was seen in past research in Western countries and other countries in the region. We suggest screening programs like

stool occult blood tests and endoscopies to find colorectal polyps, which are the early signs of colorectal cancer [22-24].

It is expected that these tests will become more common over the next few years.

It was also found that 52% of people with proximal neoplasms did not have a distal tumor. Also, a later study done in the US found that a lot of proximal tumors would be missed if only the distal colon was looked at and colonoscopy was only done on people with distal neoplasms [24-26]. This number could be over 50%. Many polyps/growth may be missed in proximal colon if only screening sigmoidoscopy is done [26-28].

### Conclusion

A lot of adenomas and carcinomas can be found and managed with colonoscopy, as this study shows. A lot of cancerous growths are found proximal to the splenic flexure. It is likely that a colonoscopy that only looks upto the splenic flexure will miss a significant proximal tumours and more so as the patient gets older. Because of this, it is best to carefully perform complete colonoscopy.

### Funding

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### Conflict of interest

None

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