Colorectal Carcinoma: Diagnostic Role of Colonoscopy.

Ramakanta Mohanty¹, Sudhir Kumar Mohanty²

¹Assistant Professor, Department of General Surgery, SCB Medical College, Cuttack, Odisha, India.
²Associate Professor, Department of General Surgery, SCB Medical College, Cuttack, Odisha, India.

Received: April 2017
Accepted: April 2017

ABSTRACT

Background & Aim: Colorectal carcinoma (CRC) is a leading cause of death in the world. It is 2nd most common cancer in Men & 3rd most common cancer in Women in the West. Colorectal carcinoma is more common in Developed countries. We have analyzed diagnostic role of colonoscopy in colorectal carcinoma. Methods: Patients admitted to General Surgery Department & Gastroenterology Department of SCB Medical College, Cuttack during a period of 4 years from 2012 to 2016. A total of 840 cases of carcinoma admitted to this hospital are considered. Results: Majority constituted cauliflower (Papilliferous) type lesions i.e. 53% and tabular lesions in 40% of cases of colorectal cancer while, tubular variety of lesions was more in rural population of the country who usually seek medical advice late and thus annular variety growing to tubular variety finds scope during efflux of time. In the present study, grade I(averagely differentiation) was 75% and poorly differentiation (grade III) was 20% and grade I (well differentiation) was only 5%. Conclusion: Colonoscopy can be considered as gold standard for diagnosis of colorectal carcinoma.

Keywords: Colorectal, Diagnostic, Carcinoma.

INTRODUCTION

Colorectal carcinoma (CRC) is a leading cause of death in the world. It is 2nd most common cancer in Men & 3rd most common cancer in Women in the West. Colorectal carcinoma is more common in Developed countries.[1] In Asia & Africa, the incidence is low, except in Japan, where the incidence has increased & approaches that of the West. Within Asia, the incidence rates of CRC vary widely and are uniformly low in all south Asian countries and high in all developed Asian countries. The burden of CRC has risen rapidly in some economically developed Asian countries like Japan, South Korea and Singapore.[2,3] Fortunately, the age adjusted incidence rates of CRC in all the Indian cancer registries are very close to the lowest rates in the world. Hospital based and population based data also show that the incidence rates for rectal cancer is higher than colon cancer in India.[4] Limited data from the rural population based registries indicate that the incidence rates of colon cancer is very low in the rural settings. However the incidence rates of rectal cancer is disproportionally higher in rural India. This study focuses Colonoscopy as diagnostic tool for CRC with comparison of Operative findings & Biopsy results with Colonoscopic findings.

MATERIALS AND METHODS

We have considered patients admitted to General Surgery Department & Gastroenterology Department of SCB Medical College, Cuttack during a period of 4 years over 2012-2016. A total of 840 cases of carcinoma admitted to this hospital are considered of which 51 cases found to have Colorectal carcinoma who are subjected to current study while rest are excluded. The findings of investigations like barium enema, ultra sound, CT scan, MRI Vis-à-vis Colonoscopy shall be recorded. Patients shall be subjected to surgery if found operable. The operative findings will be recorded & Biopsy taken during surgery shall also be recorded. The operative findings, biopsy report etc. shall be correlated with the colonoscopy findings. At the end of the study, the findings and result shall be evaluated and the role of colonoscopy in the diagnosis of colorectal carcinoma shall be ascertained.

RESULTS

In this study the incidence of carcinoma of colon was 3.2% and 1.92% in the case of carcinoma of rectum. In this study the incidence of carcinoma of colon was 47% in male and 15% in females and of rectum was 28% in males and 10% in females. In the present study the incidence was comparatively low which could as well be due to lack of provision of...
the vulnerable age groups to detect asymptomatic cases. Screening facilities would show increase incidence but at any case can't exceed the western figures. The incidence of colorectal cancer was 65% in the group 41-70 years (40% in cancer* colon and 25% in cancer rectum) and the peak was in the 5th decade (30%).

**DISCUSSION**

In the present series only symptomatic cases have been taken into account, which revealed the peak age incidence in a little bit of younger age groups in comparison with the dates reputed by authors. In the present series all the patients were in the habit of taking bulky and residual diet. Hence the low incidence in comparison with the famous authors.5-8 In the present study, palpable mass found in 75% of carcinoma of right sided colons, alteration of bowel habit was found in 78% of left sided colon cancer, rectal bleeding was found in 93% of carcinoma of rectum. The number of cases attending the hospital after 6 months of initial symptoms was significantly high in comparison with reporting during early periods (within 1 month). It can be explained that majority of cases in the rural areas are not vigilant of early symptoms of the disease (alteration of bowel habit and abnormal bleeding or discharge per rectum) and lack of scopes in the early detection of cancer cases in the peripheral health centres. As a result of which the diseases progresses thus becoming detectable at a late stage. The rectum was the site of 37.5%, sigmoid colon 22.5%, ascending colon 15%, caecum 12.5%, rectosigmoid 5% and remainder parts of colon constituted 7.5% of colorectal cancer. In the present study, majority constituted cauliflower (Papilliferous) type lesions i.e. 53% and tabular lesions in 40% of cases of colorectal cancer while, tubular variety of lesions was more in rural population of the country usually seek medical advice late and thus annular variety growing to tubular variety finds scope during efflux of time.9-11 In the present study, grade I (averagely differentiation) was 75% and poorly differentiation (grade III) was 20% and grade II (well differentiation) was only 5%. In this study the grade I lesions were low and grade II lesions were high, while, the percentage of grade I colo-rectal cancer was very low in comparison with grade II and grade III, which explains that very few cases attended the hospital in the initial stage of the disease. If asymptomatic cases which are exclude here could have been include in these series, the grade I cases would have presented more in number beyond doubt.12-15 In this series of study faecal occult blood was positive in 73.33% of rectal cancer which can be explained that majority of cases in this series have presented in late stage of disease, while Colonoscopy was positive in all cases of colorectal cancers. Biopsy and histopathology study done in all cases of colorectal cancers revealed 75% of moderately differentiated adenocarcinoma.

**CONCLUSION**

Retrograde Colonoscopy of the entire colon began in June of 1969. Momentous advances have occurred over the past two decades and the procedure is now widely accepted and practiced. Development and perfection of the methodology was at first, fraught with many difficulties, both procedural and technical, which had to be overcome. Significant opposition was engendered in the early years by some who claimed that the method was unnecessary and unduly dangerous. Time has proven otherwise, progress came about as the result of a steady stream of publication from a number of centres documenting the successful and safe application of the methodology. A recounting is presented of the many contributions that predated development of colonoscopy and colonoscopy and how the latter came about. Thus 'Colonoscopy' is considered as 'Gold Standard' for diagnosis of colorectal carcinoma which is well reflected in this study.

**REFERENCES**

1. Adloff M, Arnaud JP, Schloeda el M et al. Colorectal cancer in patients under 40 years of age. Dis Colon Rectum 1986;29:322.
2. American Cancer Society. Summary of current guidelines for the cancer-related checkup: Recommendations. Atlanta American Cancer Society, 1988 : Acs publication No. 3347.0 1-PE.
3. Akin WS, Cuckizj, Nonhover JMA et al. prevention of colorectal cancer by once-only si amiodos/copy. Lancet 1993 : 341 :736.
4. Axidrews M, YteVvmaef 13 et al. Progress report on controlled trial of fetal occult testing for the detection of colorectal cancer neoplasia. Cancer 1980;45:2959.
5. Bat L, Neumann G, shemesh E. The association of synchronous neoplasm with occluding colorectal cancer. Dis Colon Rectum 1985:28:149.
6. Beahrs OH, Henson DE, Hutler RVP et al (eds) : Colon and rectum. In : Handbook for Staging of Cancer 4th ed. Philadelphia, PA: JB Lippincott; 1992:95.
7. Becker C, Kraft JM, Goldman R, Jorgensen C. Strategies for increasing colorectal cancer screening among African Americans. J Psychosocial Oncology 2001 :9(3-4) :113-32.
8. Becker C, Kraft JM, Southwell BG, Jorengensen CM. Colorectal cancer screening in older men and women; qualitative research findings and implications for intervention. J. Community Health 2000 June: 25(3) :263-78.
9. Bland KI. Malignant diseases of the colon. In : Levine B et al. Churchill Livia stone: 1993 ; 1-45.
10. Boring CC, Squires TS, Tong T. Cancer Statistics, 1993. CA Cancer. J din 1993 ; 43:7.
11. Burkitt DP. Epidemiology of cancer of the colon rectum can. 1971:28:3.
12. Cancer Facts ez Figures, American Cancer Society (ACS), Surveillance Research, 2002.
13. Chang HR. Cancer Screening. In : Moosa AR, Schimpff SC, Robson MC (eds), Comprehensive Textbook of Oncology. 2nd ed. Baltimore, MD: Williams and Wilkins, 1992:188.
14. Clayman CB. Mass screening for colorectal cancer are we ready? JAMA 1989;261-609.
15. Collett JA et al. Distal colonic neoplasms - predict proximal neoplasia in average risk, asymptomatic subjects. Gastroenterol Hepatol 1999114(1) : 67-71.

How to cite this article: Mohanty R, Mohanty SK. Colorectal Carcinoma: Diagnostic Role of Colonoscopy. Ann. Int. Med. Den. Res. 2017; 3(4):SG05-SG07.

Source of Support: Nil, Conflict of Interest: None declared