

# Tolerance of Colonoscopy and Questioning its Utility in the Elderly Population

## Abstract:

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## Abstract

This study was carried out from Jan '12-Dec '12 to assess current practice in Kerry General Hospital against the age related indicators for colonoscopies. A total of 1474 colonoscopies were performed, 1177 (79.9%) were diagnostic and 297 (20.1%) were therapeutic, patients were divided into 4 age groups under 75, 75-80, 81-85, 86+. The trend analysis revealed an increase in diagnostic colonoscopies and decrease in therapeutic colonoscopies with age. 664 (45.04%) of colonoscopies were reported normal which made up the majority of the total diagnoses, 1330 (90.2%) of colonoscopies occurred without any complications. Main complications were patient discomfort being the highest, present in 112 (7.6%) of patients, and lowest being urticaria around the IV site present in 1 (0.1%) of the cases. Patient discomfort was higher in younger patients as evidenced by 98 cases aged <75, followed by 11 cases aged 75-80, 2 cases aged 81-85 and 1 case aged >86. Highest percentage of poor tolerance was found in 14 (1.1%) of total patients <75, 1 (0.8%) of total patients aged 75-80, 1 (1.7%) of total patients in age group 81-85 and none (0%) in age group >86. We have established the safety of colonoscopy, low rate of complications and a better tolerance in the elderly from this study, however, its utility, especially in presence of other comorbidities in elderly is questionable.

## Introduction

The tolerance and appropriateness of Colonoscopies has always been of great interest to Gastroenterologists. Various recommendations exist however no particular guidelines are available that address the issues specifically. The aim of this study was to determine the same and attempt to develop an appropriate pathway of referral for elderly patients requiring colonoscopy.

## Methods

We retrospectively analysed the data of colonoscopies performed at KGH from Jan '12-Dec '12. Data was divided 4 major age groups, <75, 76-80, 81-85, 86+. The factors analysed were Gender, Indications, Type (Diagnostic/Therapeutic), Age Categories against Depth of Insertion, Diagnosis and Complications.

## Results

A total of 1474 colonoscopies were performed, of which 728 (49.39%) were males and 746 (50.61%) were females, 1253 (85.01%) were aged <75, 133 (9.02%) were aged 75-80, 60 (4.07%) were aged 81-85, and 28 (1.90%) were of age 86+, 1177 (79.9%) of colonoscopies were diagnostic and 297 (20.1%) were therapeutic. In age group <75 988 (78.9%) were diagnostic and 265 (21.1%) were therapeutic. In age group 75-80 111 (83.5%) were Diagnostic and 22 (11.7%) were therapeutic. In age group 81-85 53 (88.3%) were Diagnostic and 7 (11.7%) were Therapeutic. In age group >86 25 (89.3%) were Diagnostic and 3 (10.7%) were therapeutic colonoscopies. 664 (45.0%) of colonoscopies were reported as normal; other diagnoses in decreasing incidence were Diverticulosis 210 (14.24%), Hemorrhoids 114 (7.73%), Single Polyp 54 (3.66%), Multiple Polyps 20 (1.36%), Diverticulosis with Hemorrhoids 17 (1.15%), Diverticulosis with polyps 14 (0.95%), Malignant tumour 12 (0.81%). Miscellaneous findings which could not be categorized as any of above made up a total of 25.03%.

Highest recorded indication was overt rectal bleeding in 194 (13.16%) patients, and lowest being chronic constipation with abdominal pain 16 (1.9%). No indications were recorded for 97 (6.6%). 53 (3.6%) were screening colonoscopies, 49 on which were performed on patients <75 and the remaining between the age range 75-85. 1330 (90.2%) colonoscopies took place without any complications. Patient discomfort was highest recorded complication present in 112 (7.6%) of the total subjects, the highest of which, was recorded in under 75 age group (98 cases) followed by 75-80 age group (11 cases), 81-85 age group (2 cases) and >86 age group (1 case). Lowest occurring complication was urticaria around IV site, recorded in 1 (0.1%) of patients. Highest percentage of poor tolerance was found in 14 (1.1%) of total aged <75, 1 (0.8%) of total aged 75-80, 1 (1.7%) of total aged 81-85 and none in >86 age group. Patient distress was documented in 5 (0.4%) of total aged <75. None in 75-80 and 80-85, and 5 (0.3%) of total aged >86. 84.53% colonoscopies were performed up to the caecum.

## Discussion

From these results we can establish the safety, low complication rate and good tolerance of Colonoscopy in the elderly. However the incidence of therapeutic colonoscopies can be seen to reduce with age. U.S. preventive services task force recommends screening for cancer using faecal occult blood, sigmoidoscopy or colonoscopy in adults from 50 yrs and continuing until 75 years. It recommends against routine screening for colorectal cancer in adult age 76-85 years, but there may be individual exceptions. It recommends against screening for colorectal cancer in adults >85 years. Average Life expectancy at birth in Ireland is 80.32 years (Male 78.18, Female 82.83);<sup>2</sup> out of which healthy life years are approximated around 65.9 for males and 67.0 for females;<sup>3</sup> so it is questionable if elderly population should undergo diagnostic/screening colonoscopies in presence of co morbidities. We recommend that age alone should not be considered a contraindication, however in presence of co morbidities, an MDT should be set up which consists of experts in Geriatrics and Gastroenterology who can assess the patient on individual basis, and decide unanimously on whether to proceed with the colonoscopy or otherwise, based on the risk/benefit ratio.

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3. Eurostat. Healthy life years and life expectancy at age 65. <http://www.cardi.ie/publications/healthylifeyearsandlifeexpectancyatage65eurostat>