

New Factors in Screening Colonoscopy for Colorectal Neoplasia

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1. Abstract

Colonoscopy screening for colorectal adenomatous polyps or cancer has become a worldwide recommendation since this is the third most common human cancer[1-3] resulting in an estimated 49900deaths annually[3]. Furthermore, polyps and cancers have been observed in younger people resulting in recommendations by societies to start screening at age 45 [4].

This review will focus on two areas of continued interest in the procedure. One is appropriate preparation and two is discussion of continued findings in risk factors for colorectal neoplasia.

2. Preparation

So when has published an outstanding review on bowel preparation for colonoscopy [5]. He lists the commonly used purgatives used at this time, see (Table 1), and the manufacturer’s recommendation for their use.

Directions for use of these products are frequently given by the pharmacy or endoscopists office but patients can become confused on their use which may result in an inadequate preparation.

As pointed out in the literature it has been shown split dosage over two days has given better results in systematic and meta-analysis[6]. The recommended protocol to follow is half of the purgative is given the day before and half the morning of the procedure,[6] which results in a better cleansed bowel.

Table 1: Commonly Used Purgatives [5].

Clenpia	Ferring
GoLYTELY	Braintree
Colyte	Schwarz Pharma
NuLYTELY	Braintree
TriLyte	Schwarz Pharma
HalfLyte	Braintree
Miralax	Schering-Plough
MoviPrep	Salix
Plenvu	Salix
OsmoPrep	Salix
Prepopik	Ferring
Suprep	Braintree

3. Risk Factors for Colorectal Cancer

In 2018 Liu and colleagues published an important paper in Gastroenterology that focused on two significant risk factors for colorectal cancer [7]. The diet and the microbiota.

It has long been known that humans eating low fiber diets are more likely to get colorectal cancer. The epidemiologic work of Burkitt and colleagues has stood the test of time[8]. The incidence of colorectal cancer is much lower in humans eating a high fiber diet than those on animal protein diets [7,8].However during the last decade scientists have noted that the microbiotas are also involved. Of note in the work of Liu and colleagues if *Fusobacterium nucleatum* is present there is more likely to develop a colorectal neoplastic process. This observation first appeared in the literature early in this century and has been replicated[9,10]. Therefore individuals who eat a high fat protein meat diet are at risk as well as those that have *F.nucleatum* in their mouth or stool excrement [7]. Screening of these individuals should be most thorough and replicated at regular intervals.

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