Quality of Pathology Specimens from Sessile Polyps Resected Using Submucosal Saline Injection Polypectomy Versus Non Saline-Assisted Hot Snare Polypectomy

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**Purpose:** To compare the quality of pathology specimens obtained by polypectomy with and without the injection of saline into the submucosa of sessile polyps.

**Methods:** Subjects found to have sessile polyps 6 mm in diameter or greater during colonoscopy underwent polypectomy as per routine. The choice of polypectomy technique was left to the discretion of the endoscopist. 20 specimens obtained by saline-assisted polypectomy and 20 by ordinary hot snare polypectomy were collected. An experienced gastrointestinal pathologist blinded to the polypectomy technique rated each specimen on the following dimensions: amount of cautery damage, degree of cautery damage, preservation of cellular architecture and overall diagnostic quality.

**Results:** Using Pearson chi squares and the Fisher Exact Test, no significant differences in quality of pathology specimens were observed between polypectomy techniques across all studied dimensions.

**Conclusion:** The use of submucosal saline for the resection of sessile polyps offers no advantage in terms of yielding a higher quality specimen for pathological interpretation.

Colorectal Cancer and Polyp Screening in Treated Acromegalic Patients

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**Purpose:** Screening guidelines for colorectal cancer (CRC) and polyps in patients with acromegaly have been challenged concerning the criticism pointing out a modest increased risk of CRC in these patients, and the potential risks of difficult colonoscopies as it is recognized in this setting. An homogeneous group of previously treated acromegalic patients has not yet been studied. The aim of this study was to evaluate the prevalence of polyps and CRC in a cohort of previously treated acromegalic patients.

**Methods:** We analyzed 40 consecutive patients with acromegaly, followed in our center, who were referred for colonoscopy screening during 2009. Seven patients were excluded from the study for serious medical conditions, pregnancy or having declined participation. All patients were considered cured (normal IGF-1 and GH, after a definitive treatment) or with controlled disease (during ongoing medical treatment). Family history of colorectal cancer was recorded. Bowel preparation was obtained using phosphosoda the day before and bisacodyl 3 days before the colonoscopy. Total colonoscopy was performed under conscious sedation by the same endoscopist. The location of polyps was defined as proximal or distal, according to their position relative to the splenic flexure. All polyps were removed, either by forceps or diathermic snare, according to their size (≤ 5mm). All retrieved polyps were sent to pathology department for histologic evaluation. Patients participating in our National Colorectal Cancer Screening Program during 2007 were included. 207 patients were examined with a standard scope in the initial 3 months, and 177 patients with high definition scope in the later 3 months. Patients with personal history of polyps, family history of colorectal neoplasia, inflammatory bowel disease, and those referred for reasons other than screening were excluded.

**Results:** Both groups were well matched, mean age (56 vs 56.6 yrs) and sex (female 66% vs 68%). A total of 77 (37%) patients had at least one polyp detected during standard colonoscopy vs 74 (43%) of patients with high definition colonoscopy. The adenoma detection rate was 18% with standard colonoscopy vs 24% with high definition colonoscopy. These differences were not statistically significant (polyp detection p = 0.11, adenoma detection p = 0.18). The adenoma detection rates varied between the two endoscopists (SD 30% vs 11%, HD 30% vs 19%). The endoscopist with the lower adenoma detection rate had a younger and more female (77% vs 48%) population.

**Conclusion:** High definition colonoscopy did not significantly improve adenoma detection rates in our average risk screening colonoscopy population. The adenoma detection rate is likely to be influenced more by the population studied and operator technique, than by the use of high definition colonoscopy during screening.

**Table of results**

<table>
<thead>
<tr>
<th>Number</th>
<th>High definition colonoscopy</th>
<th>Standard colonoscopy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Procedures</td>
<td>171</td>
<td>207</td>
</tr>
<tr>
<td>Patients with Polyps</td>
<td>74</td>
<td>77</td>
</tr>
<tr>
<td>Patients with Adenoma</td>
<td>41</td>
<td>38</td>
</tr>
<tr>
<td>Total polyps</td>
<td>110</td>
<td>108</td>
</tr>
</tbody>
</table>

High Definition versus Standard Colonoscopy: Adenoma Detection in an Average Risk Screening Population in Clinical Practice

Deep Adhikari, MD, Elise Jacques, MD, Curuchi Anand, MD. Gastroenterology, St. Vincent Hospital, Worcester, MA.

**Purpose:** High definition (HD) colonoscopy has the potential to identify more polyps, especially flat lesions which could be missed during a standard (SD) colonoscopy. This advantage may be important in screening in high risk patients. Its utility in average risk screening colonoscopy in clinical practice is unclear.

**Methods:** 378 consecutive patients undergoing average risk screening colonoscopy with two experienced gastroenterologists over a six month period in one endoscopy center were included. 207 patients were examined with a standard scope in the initial 3 months, and 177 patients with high definition scope in the later 3 months. Patients with personal history of polyps, family history of colorectal neoplasia, inflammatory bowel disease, and those referred for reasons other than screening were excluded.

**Results:** Both groups were well matched, mean age (56 vs 56.6 yrs) and sex (female 66% vs 68%). A total of 77 (37%) patients had at least one polyp detected during standard colonoscopy vs 74 (43%) of patients with high definition colonoscopy. The adenoma detection rate was 18% with standard colonoscopy vs 24% with high definition colonoscopy. These differences were not statistically significant (polyp detection p = 0.11, adenoma detection p = 0.18). The adenoma detection rates varied between the two endoscopists (SD 30% vs 11%, HD 30% vs 19%). The endoscopist with the lower adenoma detection rate had a younger and more female (77% vs 48%) population.

**Conclusion:** High definition colonoscopy did not significantly improve adenoma detection rates in our average risk screening colonoscopy population. The adenoma detection rate is likely to be influenced more by the population studied and operator technique, than by the use of high definition colonoscopy during screening.