

# ENDOCUFF VISION<sup>®</sup>



The hiding is over...

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**ENDOCUFF  
VISION®**

**ENDOCUFF VISION® has been designed to give an enhanced view of the entire colon. A single row of longer arms gently evert and flatten folds resulting in statistically significant and clinically relevant improvements in adenoma detection rates, as compared with unassisted colonoscopies.**

ENDOCUFF VISION® is disposable and simply pushes over the tip of all commonly used colonoscopes. Its unique hinged arms fall flat against the shaft of the colonoscope to create a smooth low friction surface during forward advancement. During withdrawal, the arms flare out and stabilize the tip, gently stretching the mucosal surface for close inspection.

#### **ENDOCUFF VISION®:**

- Delivers yet more tip control throughout the colon without compromising intubation and improving loop management.
- Gives an early and controlled view of the upstream surface of large folds so no need for repeated intubation.
- Enables detailed inspection of flexures by preventing sudden slip back and red out.
- Opens concertinaed tracts of sigmoid colon as the arms gently separate the folds to provide a clear view of the mucosa between them.
- Acts as a handbrake, optimising tip position during therapy and polyp retrieval.
- There really is no hiding place for polyps.

## Impact of a new distal attachment on colonoscopy performance in an academic screening center.

*Tsiamoulos ZP, Misra R, Rameshshanker R, Elliott TR, Bandaris L, Thomas-Gibson S, Haycock A, Suzuki N, Rees C, Saunders BP. Gastrointestinal Endoscopy. 2017 Apr 12. pii: S0016-5107(17)31789-3. doi: 10.1016/j.gie.2017.04.001. [Epub ahead of print]*

This study from a world center of endoscopic excellence assessed three cohorts of patients undergoing screening colonoscopy before, during and after using ENDOCUFF VISION®. There was an increase in adenoma detection rate (ADR) of 16% ( $p < 0.03$ ) and mean adenoma-per-procedure (MAP) of 83% ( $p = 0.007$ ) from the pre-cuff to cuff period using ENDOCUFF VISION®. Cecal intubation was one minute faster and in those without polyps, withdrawal was two minutes quicker. No mucosal trauma was seen. ENDOCUFF VISION® improved operator performance without greater patient discomfort through a shorter procedure time and there was no requirement for higher sedation.

## ENDOCUFF™ (EC) Increases Adenoma Detection Rates on Surveillance Colonoscopy and Improves Efficiency of Colonoscopy by Shortening of Withdrawal Times

*David J. Hass, Chris Jaffe, Lucia Malangone, Paul Feuerstadt. Gastroenterology Center of Connecticut, Hamden, Connecticut, United States.*

This prospective randomised trial of ENDOCUFF™ assisted colonoscopy vs standard colonoscopy included 562 procedures. Withdrawal time was faster using ENDOCUFF™ (11.2 mins vs 11.13 mins  $p < 0.05$ .) There was a trend towards higher polyp detection in the ENDOCUFF™ group (62.9% vs 59.6%), significantly more sessile serrated adenomas (11.2% vs 8.9%  $p = 0.37$ .) more polyps  $> 1$  cm in both in the surveillance cohort (6.4% vs 0.8%,  $p < 0.05$ .) and in those who had an adenoma at their last colonoscopy (9.6%, 1.4%,  $p < 0.05$ ). Conclusion: ENDOCUFF™ is safe and improves colonoscopy efficiency.

## ENDOCUFF™ Improves GI Fellows Colonoscopy Performance (PDR, ADR and Number of Polyps/Colonoscopy) Without Affecting Time of Procedure

*Anish Patel, Jasleen K. Grewal, William E. Karnes  
University of California, Irvine Medical Center, Orange, California, United States.*

This prospective study audited the outcome of colonoscopy performed by GI fellows who used ENDOCUFF™ assisted colonoscopy (452) or standard colonoscopy (597) at their discretion. There was better polyp detection using ENDOCUFF™: PDR 79.0% vs 57.4%,  $p < 0.0001$ , adenoma detection ADR 51.8% vs 36.3%,  $p < 0.0001$ , and sessile serrated adenoma detection 13.3% vs 6.9%,  $p = 0.0005$ . Detection rates per procedure were: PPP 3.15 vs 1.71,  $p < 0.0001$ , APP 1.59 vs 0.91,  $p < 0.0001$ , and SPP 0.21 vs 0.11,  $p = 0.0002$ . Insertion times were faster using ENDOCUFF™ 13.5±8.5 mins vs 14.9±10 mins,  $p = 0.014$ . Conclusion: ENDOCUFF™ assisted colonoscopy improves key quality indicators when used by GI fellows whilst not compromising efficiency.

## ENDOCUFF™ Increases Sessile Serrated Adenoma Detection Rates in the Right Colon

*Shawn Kaye, Mohit Mittal, Katherine Kim, William E. Karnes  
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This paper studied the number of sessile serrated adenomas detected before and after the implementation of ENDOCUFF™ assisted colonoscopy. 3375 procedures performed by sixteen gastroenterologists and colorectal surgeons met inclusion criteria and 544 serrated sessile adenomas were confirmed by histology. There was a higher detection rate using ENDOCUFF™ as compared to that with standard colonoscopy both before and after its implementation: a 58.7% increase  $p < 0.0001$  pre ENDOCUFF™ and 46.0% increase  $p = 0.0065$  post ENDOCUFF™. In the right colon where SSAs are considered to be a particular risk for interval cancer, ENDOCUFF™ was associated with a 68.5% increase  $p < 0.0001$  and 46.4% increase  $p = 0.013$ . A greater number of SSAs per procedure was also documented. Conclusion: findings are compelling and support the use of assistive devices that improve detection of SSAs.



## **ENDOCUFF™ Assisted Colonoscopy Increases Detection of Sessile Serrated Adenomas in Middle-Aged Women**

*Jasleen K. Grewal, Gregor)/ Albers, William E. Karnes*

Internal Medicine, University of California at Irvine, Orange, California, United States; Gastroenterology, University of California at Irvine, Orange, California, United States.

Sessile serrated adenomas are difficult to identify at colonoscopy and those overlooked in the right colon are considered to be an important cause of interval cancer particularly in middle aged women. This presentation studied data from 716 colonoscopies in women aged 45-60 that were performed for screening or surveillance before and after the introduction of ENDOCUFF™ assisted colonoscopy that was employed at the discretion of the colonoscopist. 531 colonoscopies were done conventionally and 185 with ENDOCUFF™. ENDOCUFF™ increased the detection of sessile serrated lesions by 56%, (16.8% vs 10.7%,  $p=0.034$ ). In the right colon these increases were 59%, (14.6% vs. 9.2%,  $p=0.040$ .) Conclusion: ENDOCUFF™ use may reduce the incidence of interval cancers in this patient group.

## **ENDOCUFF™ Assisted Colonoscopy is Associated with an Increase in the Mean Number of Polyps but a Similar Adenoma Detection Rate, Surveillance Interval Recommendation, and Amount of Sedation Medications**

*James Higham-Kessler, Gregory L. Austin*

University of Colorado Denver, Aurora, Colorado, United States

This study assessed the impact of ENDOCUFF™ assisted colonoscopy on patients undergoing colorectal cancer screening or surveillance. It documented ADR, mean number of polyps, surveillance interval recommendations, and amount of sedation. Colonoscopies were performed by an experienced endoscopist with a high ADR. 153 colonoscopies were conventional and 77 ENDOCUFF™ assisted; ADRs were 62.7 and 67.0 respectively (NS) the mean number of polyps per procedure however was significantly increased with ENDOCUFF™ ( $1.01 \pm 0.44$   $p=0.03$ .) Sedation requirement and surveillance interval recommendations were the same. Conclusion: ENDOCUFF™ assisted colonoscopy was well tolerated with an increase in polyp detection but that the advantage was marginal for endoscopists with a high baseline ADR

## **Higher Adenoma Detection Rate with ENDOCUFF™ Assisted Colonoscopy in a Screening Population**

*Lucas G. Cavallaro, Pierenrico Lecis, Ermenegildo Galliani, Elisabetta Dal Pont, Anna Giacomini, Rosanna Mel, Sabrina Di Camillo, Fabio Soppelsa, Claudia Roldo, Paolo Iuzzolino, Bastianello Germana*

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This study compared standard colonoscopy (403) with ENDOCUFF™ assisted colonoscopy (445) over consecutive years in a screening population. It focused on adenoma detection rate and advanced adenoma detection (adenomas of 1 cm or greater, or with villous/tubulovillous components or with high grade dysplasia.) ADR was 46% and 53% respectively  $p<0.05$ . The mean number of adenomas per patient (MAP) was 0.9 and 1.1,  $p<0.05$ . The advanced adenoma detection rate was 27% and 23%  $p=NS$ . Conclusion: ENDOCUFF™ assisted colonoscopy improves ADR and MAP but does not increase the detection of advanced adenomas.

## **Higher Adenoma Detection Rate with ENDOCUFF™: A Randomized Controlled Trial**

*David Garcia, Coty Gonzalez-Fernandez, Rafael Barreto-Zuniga, Nancy E. Aguilar-Olivos Adriana F. Romano, Guido Grajales-Figueroa, Felix I Tellez-Avila Gastrointestinal Endoscopy, National Institute of Medical Sciences and Nutrition 'Salvador Zubiran', Mexico City, Mexico*

This prospective trial compared 174 patients randomized to ENDOCUFF™ assisted colonoscopy with 163 undergoing standard colonoscopy. It assessed polyp detection (PDR) and adenoma detection (ADR) rates. The PDR was higher in the ENDOCUFF™ group 29.9% vs 15.9%,  $p = 0.002$  and so was the ADR 22.4% vs 13.4%,  $p = 0.034$ . Adenoma and polyp analysis showed significantly more polyps between the size of 5 mm and 1 cm in the ENDOCUFF™ group 45.4% vs 31.6%,  $p=0.037$  as well as more flat polyps 16.7% vs 7.9%,  $p= 0.039$ . It also had a significantly higher right colon polyp detection rate 35.5% vs 30.1 %,  $p = 0.006$ . Cecal intubation time was shorter in the ENDOCUFF™ group (10 minutes vs 12 minutes,  $p = 0.002$ ). Conclusion: The ENDOCUFF™ is a useful tool for adenoma detection that is safe, effective, and easy to use.