

## **Sigma's 30th International Nursing Research Congress**

### **Comparison Comfort and Duration of Procedure in Different Starting Positions for Colonoscopy: A Systematic Review**

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#### **Background**

At present, colonoscopy is mostly started with patients in the left lateral decubitus position. Some studies show that patients feel less discomfort and undergo a quicker procedure when colonoscopy is started with them in the right lateral decubitus position or in the prone position. However, up till now, researchers have still yet to agree upon the optimal starting position for colonoscopy.

#### **Objective**

This study compares different starting positions for colonoscopy and comfort levels when the procedure is started with patients in them, and seeks to find the optimal one.

#### **Method**

This study performs a systematic literature review by searching four Chinese or English databases of Cochrane Library, PubMed, Embase and CEPS for keywords of colonoscopy and position. The results are sorted by relevance and by date from January 1, 1946 to October 31, 2017, and appraised with CEBM Randomized Controlled Trials Critical Appraisal sheet and narrowed to three studies for analyses.

#### **Findings**

The systematic literature review shows that two out of the three studies focus on the differences between the prone position and the left lateral decubitus position, and find that the average time for colonoscope to reach ileocecal valve in the prone position is shorter than that of the left lateral decubitus position, and that there are no significant differences in patient comfort between them. The other study, on the other hand, shows that the right lateral decubitus position is better than the left in terms of both the average time of colonoscope to reach ileocecal valve and patient comfort.

#### **Conclusion/practical applications**

The systematic literature review does not include any domestic studies. The three selected studies done by foreign researchers indicate that it takes less time for colonoscope to reach ileocecal valve when colonoscopy is started with patients in the prone position or right lateral decubitus position than in the left lateral decubitus position. Yet, there still lies inconsistency when it comes to patient comfort. It is suggested that more rigorous experimental research be done in the future. For example, a randomized controlled study can be done to clarify the relationship between the time of colonoscope to reach ileocecal valve and patient comfort in different starting positions to serve as domestic clinical practice guidelines for further applications

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**Title:**

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### Keywords:

Comfort, colonoscopy and position

### References:

- Bachman, A. S., Cohen, E. L., Collins, T., Hatcher, J., Crosby, R., & Vanderpool, R. C. (2017). Identifying Communication Barriers to Colorectal Cancer Screening Adherence among Appalachian Kentuckians. *JOURNAL OF HEALTH COMMUNICATION* 1-9. doi: 10.1080/10410236.2017.1351274
- De Silva, A. P., Kumarasena, R. S., Perera Keragala, S. D., Kalubowila, U., Niriella, M., Dassanayake, A. S., . . . de Silva, H. J. (2011). The prone 12 o'clock position reduces ileal intubation time during colonoscopy compared to the left lateral 6 o'clock (standard) position. *BMC Gastroenterol*, *11*, 89. doi: 10.1186/1471-230x-11-89
- East, J. E., Bassett, P., Arebi, N., Thomas-Gibson, S., Guenther, T., & Saunders, B. P. (2011). Dynamic patient position changes during colonoscope withdrawal increase adenoma detection: a randomized, crossover trial. *Gastrointestinal Endoscopy* *73*(3), 456-463. doi: 10.1016/j.gie.2010.07.046
- Enochsson, L., Noel, R., Wedén, M., Sjöqvist, U., Boman-Galiamoutsas, M., Arnelo, U., & Törnblom, H. (2009). ScopeGuide® reduces pain during colonoscopy. *Gastroenterology*, *136*(5), A912. doi: 10.1016/S0016-5085(09)64215-3
- Hansel, S. L., Prechel, J. A., Horn, B., Crowell, M. D., & DiBaise, J. K. (2009). Observational study of the frequency of use and perceived usefulness of ancillary manoeuvres to facilitate colonoscopy completion. *Digestive and Liver Disease*, *41*(11), 812-816. doi: 10.1016/j.dld.2009.03.010
- Hsueh, F. C., Chen, C. M., Sun, C. A., Chou, Y. C., Hsiao, S. M., & Yang, T. (2016). A Study on the Effects of a Health Education Intervention on Anxiety and Pain During Colonoscopy Procedures. *The Journal of Nursing Research* *24*(2), 181-189. doi: 10.1097/jnr.000000000000112
- Koklu, H., Koklu, S., & Ozturk, O. (2016). Right- versus Conventional Left-Sided Starting Position for Colonoscopy: The Issues to Be Considered. *The American Journal of Gastroenterology* *111*(6), 897. doi: 10.1038/ajg.2016.62
- Rex, D. K. (2008). Achieving cecal intubation in the very difficult colon. *Gastrointest Endosc*, *67*(6), 938-944. doi: 10.1016/j.gie.2007.12.028
- Uddin, F. S., Iqbal, R., Harford, W. V., Dunbar, K. B., Cryer, B. L., Spechler, S. J., & Feagins, L. A. (2013). Prone positioning of obese patients for colonoscopy results in shortened cecal intubation times: a randomized trial. *Digestive Diseases and Sciences* *58*(3), 782-787. doi: 10.1007/s10620-012-2468-x
- Vergis, N., McGrath, A. K., Stoddart, C. H., & Hoare, J. M. (2015). Right Or Left in COLonoscopy (ROLCOL)? A Randomized Controlled Trial of Right- versus Left-Sided Starting Position in Colonoscopy. *The American Journal of Gastroenterology* *110*(11), 1576-1581. doi: 10.1038/ajg.2015.298
- Zuber-Jerger, I., & Kullmann, F. (2006). A prospective study of factors that determine cecal intubation time at colonoscopy. *Gastrointestinal Endoscopy* *63*(1), 358-359. doi: 10.1016/j.gie.2005.09.007

**Abstract Summary:**

This study compares different starting positions for colonoscopy and comfort levels when the procedure is started with patients in them, and seeks to find the optimal one

**Content Outline:**

Clear, focused ideas with appropriate detail that relate to the associated event outcomes

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