

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 11141

Title: Increasing age and longer duration of colonoscopy are factors to predict adenoma detection in both proximal and distal colon

Reviewer code: 00225277

Science editor: Ya-Juan Ma

Date sent for review: 2014-05-06 21:40

Date reviewed: 2014-05-16 02:09

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
[Y] Grade A (Excellent)	[Y] Grade A: Priority Publishing	Google Search:	[] Accept
[] Grade B (Very good)	[] Grade B: minor language polishing	[] Existed	[] High priority for publication
[] Grade C (Good)	[] Grade C: a great deal of language polishing	[] No records	[] Rejection
[] Grade D (Fair)	[] Grade D: rejected	BPG Search:	[Y] Minor revision
[] Grade E (Poor)		[] Existed	[] Major revision
		[] No records	

COMMENTS TO AUTHORS

This paper is an interesting study on the factors influencing the adenoma detection rate in colonoscopy. The authors use a colonoscopy database designed for other aims which make it easy to avoid bias in patient selection. Were the patients with polyps found during colonoscopy treated in the same session? Were these patients excluded from the analysis? If included, was the total colonoscopy time influenced by the polyp treatment?

Answer: You mention a very important point. Indeed, we must state that polypectomy takes some time and therefore may have biased our results. In 14% of cases in which adenomas were found lesions were not resected in the same session. In further 44% adenomas were resected immediately using the biopsy forceps. Thus, in these cases expenditure of time might have been negligible. Snare resection was carried out in 40%. In these cases polypectomy might have biased our results by increasing the duration of the procedure. It would have been useful to subtract the duration of resection in order to avoid bias. Unfortunately, as this was a retrospective study, we were not able to measure the duration of resection. We mentioned this limitation in the revised version of our

manuscript.

The authors state that the presence of inflammation is inversely proportional to the polyp detection rate, but the colonoscopy reports without specific findings were probably prone to noting slight inflammatory changes highlighted in the mucosa. The amount of propofol used and the investigation time were probably directly proportional despite the variability induced by age and comorbidities.

It is curious that serrated adenomas were more frequent in the distal colon. In fact, this type of lesion is more frequent and often multiple and found in the proximal colon. Some comment on this aspect would be welcome.

Answer: Indeed, the fact that more serrated lesions were found in the distal part is not understood.

Overall, serrated lesions were detected rarely. Only 6 lesions were found in 551 cases. Therefore the mainly left-sided distribution might have been observed by chance. We mention this explanation in our revised manuscript.

The data in Results (odds ratio) are difficult to read and would probably be clearer in a graph. The odds ratio and even the significant odds ratio after multivariate analysis show very few differences as compared with the null hypotheses. The authors consider that these differences are clinically relevant, which needs some ancillary explanation. The authors describe a relationship between the odds ratio and the percentage of polyp detection or colonoscopy time. It is difficult for the readers to easily understand the conversion from the odds ratio to the percentage of increasing polyp detection rate. These conversions need some explanation for the readers since, as stated in the text, small differences in the odds ratio induce great changes in the percentages, for instance, in the polyp detection rate.

Answer: As stated in the section "**Patients and Methods**", in case of continuous data such as investigation time or age, odds ratio describes the ratio of odds of a subject with value $x+1$ and a subject with value x . If we take a closer look at patient age, for instance, x can stand for a predefined "reference" and OR has to be interpreted as the chance (odds) to detect adenomas, provided that the reference age is increased by one year ($x+1$). This interpretation can be transferred to other

continuous data (e.g. propofol dosage). One cause of small OR values (which nevertheless are statistically significant) might be that x+1 (one patient year, one minute of procedure time, one mg of propofol) is a small step relatively. We tried to better explain the way OR should be interpreted in the statistical section of the "Methods and Patients" part of the revised manuscript. **ESPS Peer-review**

Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 11141

Title: Increasing age and longer duration of colonoscopy are factors to predict adenoma detection in both proximal and distal colon

Reviewer code: 02533156

Science editor: Ya-Juan Ma

Date sent for review: 2014-05-06 21:40

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CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

The authors present the findings of a post-hoc analysis of prospective study of the use of capnography in colonoscopy performed to examine factors associated with adenoma detection. The results are of some interest, particularly the findings that detections of adenomas in the right colon is almost as common as in the left colon, and notably that most patients with right sided adenomas do not have adenomas on the left. The findings are of impact due to the current discussion of the role of flexible sigmoidoscopy as a primary screening modality. I believe that the manuscript would be of much greater impact if the authors revised it to focus primarily on this issue. They present the results of multivariate analysis of factors associated with adenoma detection (overall and in the right and left colon specifically) but these analysis have significant flaws. While they highlight the increased risk of adenoma detection with increasing age and male gender (which might be expected) they also

emphasize (in the title of the manuscript) the association with increased duration of procedure. However, this cannot be an independent association as the presence of polyps (requiring extra time to perform polypectomy) will inevitably lead to a longer procedure without this being of itself 'predictive' in any way.

Answer: Thank you very much for this important comment. We addressed this issue in our answer to reviewer 00225277 above. In the results of the revised version of our manuscript we specify the mode of resection when polypectomy was performed immediately within the same session. We also point out the limitation of our finding in the "Discussion" section.

Likewise I suspect further analysis of confounding variables elsewhere, such as the fact that in-patient setting and procedure performed later in the day were both associated with a finding of advanced neoplasia - surely this is a spurious association as in-patients will tend to be scoped later in the day and so these are not independent variables.

Answer: Again, you mention an important issue. As you state correctly, these results must be interpreted carefully as multivariate analysis was not performed regarding advanced adenomas and thus possible confounders may not be eliminated sufficiently. Therefore the variable "inpatients setting" may not be a true predictor for advanced lesions. We now point out this restriction in the section "Limitations". I would suggest revising the manuscript to focus on the issue of right/left polyp distribution in the cohort. The methods are otherwise sound and the manuscript well written though there are some typographical errors (Incorrect spellings - Page 7 female Page 13 tobacco). If the current format for the manuscript is retained then I'd suggest an acknowledgement of some of the issues about confounding variables I have highlighted above.

Answer: We agree with you on the point that the absence of simultaneous occurrence of adenomas is important. In the discussion section of our revised manuscript we point out this result as the main finding of our study. Nevertheless, this study was planned to reveal possible predictor for side specific adenoma detection. We therefore would rather keep the present structure of the manuscript.

Finally, we would like to state, that due to typing errors in Table 2 wrong numbers occurred in line 10 and 11 of the table. These errors are now extinguished in the revised version. The tenor of our manuscript was not affected by these errors in any way. We deeply apologize for our mistake.

We would like to thank the reviewers for the important and constructive comments. We are confident that our answers and the associated changes address all their concerns.