PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 54694

Title: Clinical prediction of complicated appendicitis: a case-control study utilizing logistic regression

Reviewer's code: 03262127

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Surgeon

Reviewer's Country/Territory: Russia

Author's Country/Territory: Japan

Manuscript submission date: 2020-02-13

Reviewer chosen by: AI Technique

Reviewer accepted review: 2020-02-15 12:19

Reviewer performed review: 2020-02-19 11:45

Review time: 3 Days and 23 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This is a well designed, performed and written research paper on clinical prediction of complicated appendicitis. My comments and remarks are presented below. GFR (Abstract) - unlike other abbreviations, this one was not explained in full in the text. Categorization of contentious variables (Section Title, Page 12) - continuous is right. contentious variables (Paragraph "Univariate Comparisons", Page 13) - see above. All statistical analyses were performed using performed using Stata/IC software (Page 14) - "performed using" is presented twice. To be removed. In terms of the univariate analysis, our study showed that advanced age was a significant predictor of CA, which is compatible with the findings of previous studies [Drake FT. JAMA surg 2014] - Page 18. This kind of referencing is substandard. Please use a Reference number including a source into the Reference list. Role of inflammatory markers in decreasing negative appendectomy rate: A study based on computed tomography findings Ebru (Reference 13) - how to explain "Ebru"? This word is absent in an original Title. Role of alvarado score and biological indicators... (Reference 14) - the word "Alvarado" should be capitalized. In the article, you present the definition of "Complicated Appendicitis". I think, it will be right to include a similar definition of "Simple Appendicitis". I want to especially appreciate that the authors perfectly understand the limitations of their work. Reading the text, I immediately noted for myself that the radiological definition of the concepts of "simple" and "complicated" appendicitis can seriously differ from operational findings. And it was very nice to read the paragraph dedicated to this at the end of the article. Apparently, in a work based on clinical material, where the percentage of non-operated patients is large, the authors' approach should be considered the most correct.

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 54694

Title: Clinical prediction of complicated appendicitis: a case-control study utilizing logistic regression

Reviewer's code: 05189339

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Czech Republic

Author's Country/Territory: Japan

Manuscript submission date: 2020-02-13

Reviewer chosen by: Jie Wang

Reviewer accepted review: 2020-03-18 07:57

Reviewer performed review: 2020-03-18 09:29

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[Y] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This is a very-well written paper about a predictive potential of laboratory and non-laboratory markers with respect to differentiation between simple and complicated acute appendicitis. I commend authors on the paper presented and the amount of work done. There are only a few minor objections I feel you might be willing to address: 1) the authors should consider using MeSH terms as keywords; 2) "which is compatible with the findings of previous studies [Drake FT. JAMA surg 2014]", please consider a standard citation instead of [Drake FT. JAMA surg 2014], i.e. number 6; 3) the authors may be willing to check whether the units used when referred to CRP are correct, i.e. the authors are using mg/dL, whereas normally mg/L is used. If they are using it on purpose, it is alright, just make sure the unit they use is really the one they want; 4) I am slightly uncomfortable with the formulation "early detection of patients with complicated appendicitis (CA)". In my opinion, if acute appendicitis is detected and treated timely, it may not progress into a complicated form. I suggest the authors rewrite this sentence. 5) Despite the authors admit it as a limitation to this study, the incidence of simple as well as complicated appendicitis were not controlled clinically by intra-operative and histopathology finding. This is a limitation to the study design that cannot be addressed. Although high, the sensitivity and specificity of CT is not (although almost) 100%. The authors should comment on why only 11.1% and 31.6% of patients with SA or CA, respectively, were operated on. Conservative treatment should be reserved only for special cases, it is not a standard of care. Please comment on this in discussion and mention briefly the role of conservative treatment of AA nowadays, if possible including reference to guidelines. I thank to the authors and kind regards to Japan from the Czech Republic!

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 54694

Title: Clinical prediction of complicated appendicitis: a case-control study utilizing logistic regression

Reviewer's code: 05189339

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Czech Republic

Author's Country/Territory: Japan

Manuscript submission date: 2020-02-13

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2020-04-11 21:36

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Review time: 1 Hour

Scientific quality	[Y] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[Y] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

All my comments were addressed with precision. I can fully recommend this very well-written paper to be published in WJCC.