

ABC's of Writing Medical Papers in English

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Publishing medical papers in English is important as English remains the predominant language for most medical papers (both electronic and traditional journal publications). In addition, journals with the highest impact factors are published in English and a publication in English thus enhances the visibility of authors and their institutions, and is important for promotion in some academic centers. This article reviews the basic principles that will help you successfully publish a manuscript in English. Although other books and articles are available on this subject, there are relatively few references. The present article is based on this author's experience of publishing nearly 400 articles in English. It will emphasize writing original articles, but the principles can be applied to virtually any type of manuscript.

Index terms: *Publishing; Writing; Research design*

INTRODUCTION

Writing papers can be extremely difficult for those whose first language is not English. The importance of publishing papers in English is based upon several factors: 1) English remains the most commonly used language for medical publications (both online and the traditional paper format); 2) Most of the higher impact factor journals are published in English; 3) Publications in English improve visibility of the author and institution and can be vital to one's academic promotion (1). Since there are no specific rules about how to publish in English and few references to guide an author on how to publish in English, the

following review is based mostly on this author's personal experience in publishing over 300 MEDLINE indexed articles and are what I consider to be the most helpful tips for writing papers in English and for increasing the chances that your manuscript will be published. A helpful web site for information on publications is provided by the ICJME (International Committee of Medical Journal Editors) at <http://www.icmje.org/>.

Basic Principles

You have only one chance to make a good first impression. When a manuscript is reviewed it has the best chance of acceptance on the initial (and sometimes only) review. While the vast majority of manuscripts are published on their merit, there is subjectivity that can sway the reviewer toward a positive decision. This subjectivity is often based upon how the paper is presented to the reader (in this case, the reviewer) and can be nearly as important as the scientific quality of the manuscript. An analogy is the "presentation" of a meal. While one meal may taste just as good as another, the one with the better presentation is likely to be judged superior. In a manuscript

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the “presentation” is in the writing style, neatness (correct syntax, lack of misspelled words and typographical errors), and quality of images, tables, and references. Close attention to detail (such as spell checking) can improve the look of the paper and thus its perceived quality.

Select the Correct Journal

There are several considerations when selecting the appropriate journal to submit a manuscript to (2). This is based not only on the topic, but also, on the strength of the manuscript and its appropriateness to the “audience” (type of reader).

High impact factor journals (discussed later) that tend to emphasize basic science or clinical articles are unlikely to accept manuscripts. However, the scientific strength of a manuscript may overcome this obstacle. Procedural papers that are well-designed, well-powered (adequate sample size as discussed later), randomized trials, and those that have broad applicability to clinical care (e.g., procedures that affect the outcome of variceal bleeding) (3) can be published in such journals. Scientific quality of the manuscript can be difficult for an author or authors to address objectively and realistically. However, the greater the scientific quality of the manuscript, the greater the likelihood that it will be accepted in a journal with a high impact factor.

Another consideration in selection of a manuscript is for the author to select the journal’s audience. For example, a predominantly surgical or transplant journal is unlikely to accept a paper that is based on endoscopic or interventional radiologic techniques unless they can integrate them into surgery. Examples include articles about radiologic or endoscopic treatment of post-transplant complications (4, 5) or alternatives to surgery for specific situations (high-risk or non-operative patients) (6).

When selecting the correct journal, you must also assess whether the particular journal has recently published a

similar article (2). If a similar paper has not been recently published, there is generally no effect on the ability to publish the manuscript. However, if a similar article has been recently published, it can either help or hinder the consideration of a manuscript. For example, if the planned manuscript with similar methods shows similar results to the recently published paper, it is less likely to be considered for publication, as it is no longer considered novel. There are three exceptions: 1) A manuscript that has results that are in contrast to a recently published study and that show an opposing view creates controversy and diversity (which then increases interest); 2) Alternative techniques are used, yet show the same results demonstrating there is more than one method to approach a difficult disorder; and 3) Manuscripts where a similar article is submitted simultaneously by another author. In this case, the editor may choose to publish both in the same issue of the journal to create a theme for that issue (7-9).

Often, more than one journal could be an appropriate home for an article. Once the author(s) have narrowed their selection to a few journals, it is best to choose the journal with the highest impact factor. Generally, the impact factor is a reflection of the quality and reputation of the journal, and the manuscript will likely generate greater recognition and potentially have a greater influence both on stimulating others to write similar articles and/or influencing patient care. A good overview of the importance, calculation, and flaws of the impact factor is available (10). The impact factor of a specific journal can be found through ISI Web of KnowledgeSM (see Table 1 for instructions on how to find impact factors).

A final consideration when deciding on a journal is whether the author would like to influence one type of readership or another. For example, you may choose to submit a manuscript with an endoscopic technique to influence change among other disciplines (4) or to a more regional journal (11), which may lead to an increase in practice referrals.

Table 1. How to Find Impact Factors for Journals

1. Go to the ISI Web of Knowledge home page (apps.isiknowledge.com/).
2. Click on “Additional Resources” at the top of the page.
3. Click on “Journal Citation Reports”.
4. Choose “Search impact factor for a Specific Journal” if information for a specific journal is needed, or choose “View a group of journals” for reviewing a list of journals (Examples “Gastroenterology & Hepatology”, “Radiology, Nuclear Medicine & Medical Imaging”, “Surgery”).
5. Impact factors can be or by impact factor from highest factor to lowest factor.

Preparing the Manuscript

Once the author(s) have chosen the journal to which they intend to submit an article, the preparation process begins. The authors should carefully review the "instructions for authors" for the particular journal (2). Nearly all journals have web sites for online submission. The "instructions for authors" page describes the format for each type of article (original article, case report, review, editorial, etc.) and is available online at the journal home page. Such instructions include how to format the abstract, maximum allowable word counts and images, how to prepare images (i.e., jpeg or tiff), need for a cover letter, and disclosure forms. The author MUST follow these instructions carefully to prevent outright and immediate rejection. Although violation of these rules generally does not mean the manuscript cannot be resubmitted, it will likely result in delays.

The next step is to perform a careful literature search to identify similar papers published in English. This serves several purposes: 1) It serves as a guide and demonstrates examples of proper wording used in various sections of the manuscript (for example, the Methods section), which can then be written similarly. It must be emphasized that this is to be used only as a guide. You must but be careful not to copy word-for-word what is written, since this is considered plagiarism; 2) It provides ideas for the discussion section; and; 3) It allows generation of a reference list.

How to Manage References

References are an important part of a manuscript in several ways. A manuscript in which the reference list does not contain the most important and pertinent articles is considered incomplete. This relates back to the prior section in performing a complete literature search.

One way to create a complete literature search is to find an article that addresses a similar topic using a medical literature search engine such as PubMed (<http://www.ncbi.nlm.nih.gov/pubmed/>), a free database accessing primarily the MEDLINE database. Using this site, once an article is identified you can use the "Related citations" link; this will retrieve all related articles which can be sorted by using the link "Display Settings" at the top. Selecting "Pub Date" will sort the articles chronologically. You can also find reviews by using "Filter your results" and then select "Review." A tutorial is also provided which demonstrates other options.

When publishing original articles in which there are many

prior publications, the manuscript should only include the most recent or largest sample size publications, although you should be sure to include "landmark" studies that all subsequent papers are based upon despite the date of publication.

You must ensure that the references are correct. This includes correct spelling, title, and names and correct correlation in the text. When mistakes are made in the references it reflects poorly on the quality of the authors' work.

There are two ways to avoid incorrect references. One is to use PubMed, select the desired reference(s) and then select "send to". Then in a drop-down, select "file" a file will open and you can copy and paste the citation(s) into the document. Once the reference(s) is (are) identified they can be stored on the site by creating your own account and "collections" (folders) where they will always be available to use for the same or other manuscripts. To then use the reference, click on it and choose the option "send to file", copy the reference and paste it into your document (see appendix 1).

The references must be in the format requested by the particular journal. For example, many journals request that all authors be listed when there are six or fewer but when there are more than six authors the first three are cited followed by "et al". These requirements are present in the instructions for authors as previously mentioned.

When writing the manuscript you should use a reference manager. This allows you to add and delete references and reorder them without having to perform a renumbering process manually. This also avoids errors in the references. Although there are many reference managers available such as EndNote®, it is important to realize that Microsoft Word® has a "built-in" reference manager and thus can be used by anyone who uses Word® (which is the software used almost universally to create documents). Thus, when multiple authors are electronically altering (sharing) the document, they can add or delete references without the need for a separate program. Instructions on how to use the "endnote feature" in Microsoft Word® for the PC can be seen in appendix 1. Microsoft Word for Mac™ is used in a similar fashion.

Writing the Manuscript

There are many ways to approach writing a manuscript. Some authors start at the title page and work down through

each section (Introduction, Methods, Results, Discussion, Conclusions). Others write an abstract first and expand the document for each section. This may be the easiest and most practical way to begin, especially if an abstract was prepared for presentation at a scientific meeting (12). However, there is no exact order that must be followed and some authors start with the Methods and Results sections and move to other sections later.

Some general style points are worth noting. You should avoid writing excessively long Introduction and Discussion sections. Indeed some journals now have word or space limits to the Introduction section. In any case, longer (more words) does not equate to better.

The introduction should do just that: lay the groundwork for the paper. The most important key points should be mentioned with references that lead up to the purpose of writing the paper.

Methods should be written as clearly as possible and in as few sentences as possible. If a method used is similar or identical to one described in a prior publication you can say something like "Pseudocyst drainage was performed as previously described" (with reference). Then say, "Briefly, using a 20 Gauge needle (Model type, Manufacturer, Company location) was passed through a standard duodenoscope (Model type, Manufacturer, Company location) and was used to puncture the area of endoscopically visible extrinsic compression in the stomach or duodenum". You should avoid editorializing in the methods and results sections.

The Discussion section should address the most important points you want to make in the manuscript. It needs to be coherent and you should not feel obliged to fill as much space as possible. You should only write what needs to be written to make the points and not to just "fill space." The Discussion section should begin with an introductory basic overarching statement that summarizes what is known about the topic, and what led to the performance of the study. Each subsequent paragraph should contain a single, main point. There should be a transition sentence to the next paragraph, either at the end of the previous paragraph or as the first sentence in the next paragraph. For papers with original data, you must help the reader understand what makes the manuscript unique or different, or confirms what has previously been published.

During the writing process the "track changes" feature of Word® should be used when sharing the document between authors. This makes it easier to see changes made by other authors so that everyone is "on the same page." It also

allows you to identify which author made these changes and the exact time and date.

Other Helpful Features

Use organized and well-designed tables to present your data. Illustration (Fig. 1) and high-quality figures (resolution at least 350 dpi and sized appropriately) should be used to help the reader understand the concepts. Microsoft Office Picture Manager® allows "auto correction", cropping, changes in contrast and other features to enhance the image quality. This is particularly important for interventional (procedural, surgical) manuscripts (not purely basic science articles). In addition, many journals accept videos now and the inclusion of a high-quality video can add to the quality of an article and may convince the reviewers and editors that the article is worthy of publication. However, journals have problems when the file sizes are too large (in general they shouldn't be bigger than 100 MB, maximum, or reviewers, editors, and later, readers have trouble viewing them).

In the Results section, you should briefly state the results in an understandable manner and then refer the reader to tables with results for more complete details.

Algorithms (schematic diagrams) should be used to show patient flow through the study, especially when trying to explain them in the Methods section is complicated.

Statistics

You should seek the assistance of a statistician when

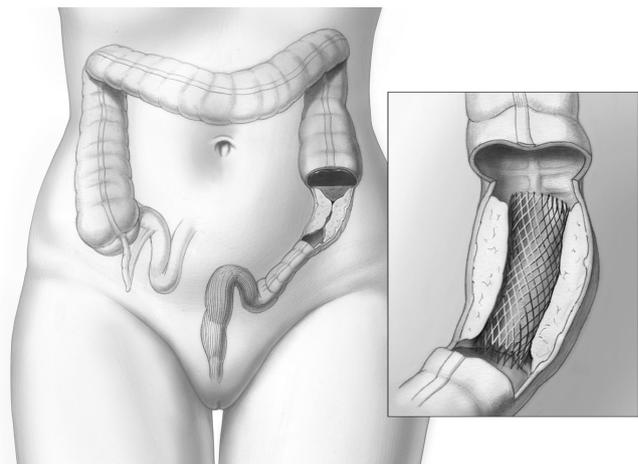


Fig. 1. Example of high quality illustration showing malignant colonic obstruction and subsequent indwelling self-expandable metal stent.

original, comparative data are used. Preferably this should be done prior to writing the paper and is a basic principle of prospective studies since sample size calculations and identification of primary endpoints are needed. A statistician is not always necessary if the study is purely descriptive (case reports, case series). It is important to realize that many manuscripts are rejected on the basis of incorrectly or inadequately performed statistics BUT it is also important to realize that the statistics are only as good as the data (in other words, you can't make bad data look good by using good statistical methods).

Language Editing

This may be the most important aspect of the manuscript in terms of "presentation of the meal" and "making a good first impression" as were described earlier. It is important to have someone whose first language is English and with expertise in medical writing carefully review the manuscript for English expression. This person should have the authority to make changes directly to the document as they see fit. Also request that this person or persons use the "track changes" feature of Word to allow authors to see what has been changed. This will allow the authors to see what they have done wrong, which will help them when writing manuscripts in the future. However, there is concern about "ghostwriting", particularly as it relates to industry sponsored articles (13).

Minor Points

Some minor points that make the manuscript cleaner and show an understanding of the language are worth mentioning. 1) The word "data" is plural, not singular. Thus, it is incorrect to write "the data shows X." The correct way is to write "the data show that treatment A is beneficial" or "our data show that the success rate of this approach....." 2) You should only use the word significant when it applies to data where the *p* value is considered significant ($p < 0.05$). For example, do not write "Placement of an esophageal stent provides significant benefits for the patient." While the statement may be true it is not associated with a statistical value. 3) Generally avoid using "I or we." For example, instead of writing "we have shown esophageal stents to be....." instead write "the data from this study show that esophageal stents are....."

Spell out words used later used as acronyms at first

mention; then use the acronym for the remainder of the manuscript. An example is "Self-expandable metal stents (SEMS) provide superior patency to plastic biliary stents for distal bile duct cancer". After this, SEMS can be used in place of self-expandable metal stents. Avoid excessive use of non-standard abbreviations because it is confusing to the reader.

Authorship

The number of authors should be limited to include only those who meet criteria for authorship. Often these criteria are present in the instructions for authors for the particular journal and many journals now require statements as to the contribution of each author to the manuscript. Although it is tempting to add an author for political reasons or because they referred patients for the study, it detracts from the legitimacy of the study. As a general rule, an author is someone who has contributed substantially to the manuscript, either by study design or data review (usually not necessary for small case series or case reports), or those who have substantial involvement in drafting or editing the manuscript. Additional information can be found at <http://www.icmje.org/>.

Manuscript Decisions And Author Responses

After the manuscript is submitted, the journal will return a decision, usually within 4 to 6 weeks (often sooner). There are several possible decisions (depending on the journal) which include the following: outright rejection (rejected without being sent for peer review), reject/resubmit (which entails a complete re-write without guarantee of acceptance even if all of the revisions are done), accept with major revisions (which usually, but not always means it will be accepted if the points raised in review are adequately addressed), accept with minor revisions (which almost always means it will be accepted if all of the points are adequately addressed), and reclassify /resubmit (which means it needs to be revised not only for content but resubmitted as another type of article - an example is when it was submitted as an "original article" when it is more appropriate as a "new technique" or "case series").

Similarly, there are several responses the author(s) can make to the decision. It should be emphasized that if a rejection letter is received it should not be taken

personally. You should also refrain from sending a letter of plea or anger to the editor. This rarely changes the decision and can generate a negative reputation amongst the editors of the journal. It is best to revise the manuscript according to comments made by reviewers and to resubmit it to another journal. It is inappropriate and unethical to revise and resubmit to the same journal when the final decision is reject.

However, it is even more important not to give up; otherwise the manuscript will never be published. This requires perseverance and careful consideration of where to resubmit the revised article. The decision of where to next submit the manuscript can be based upon impact factor (move to a lower impact factor journal) or you might choose an entirely different type of journal (for example, from a radiologic journal to a surgical journal), as appropriate. The bottom line is to not quit as "persistence wears down resistance."

If the decision from the journal is other than rejection, you can revise and resubmit the article. If you chooses not to revise and resubmit to that journal, it is proper etiquette to return to the web site and click on "decline to revise" if the journal offers that as an option.

How To Respond And Resubmit

The journal will require you to submit a "point-by-point" response letter when the revised manuscript is submitted. To assist the editors, the author should copy and paste all the reviews (see sample letter in appendix 2) and place the reviewer comments in bold with the responses in regular font (or vice versa). The response to each point should explain the rationale for the response, that the manuscript was changed or not changed accordingly, and where it was changed in the manuscript (page number, paragraph number, line number). Most journals will require submission of two copies: one with the changes highlighted (tracked) and one "clean" with all changes accepted or non-highlighted.

Ethics

There are a variety of ethical considerations (14), many of which are mentioned in the "instructions for authors" and too many to detail in this article. Most of these ethical concerns are self-evident but some deserve discussion. The first is to avoid "double" or "duplicate" publications-

publishing the same, similar, or overlapping results. It is unethical to simultaneously submit the same manuscript to more than one journal at a time, to plagiarize others' work, or to fabricate data. Doing this can lead to loss of credibility and make it difficult (sometimes impossible) to publish future articles in any journal. Again, more information can be found at <http://www.icmje.org/>.

In some cases there is overlap between studies or the same patients were used in another study but the focus of the most recent submission is different. In these cases, the authors should identify and cite the other publication(s) (4, 15-17). One example is if the specifics of a technique are now elaborated upon but only briefly mentioned in a prior study you could state: "The outcome of percutaneous drainage in this patient population was previously described (include citation); however this article describes the specific techniques used, which were not elaborated upon. In this study we report the specific details of this technique."

CONCLUSIONS

Writing and publishing a manuscript in English is a difficult task, but can be accomplished with organization, hard work, and perseverance. It is hoped that this manuscript provides a framework for how to achieve this goal. Successful publications lead to satisfaction, career advancement, and over time, can be an enjoyable process.

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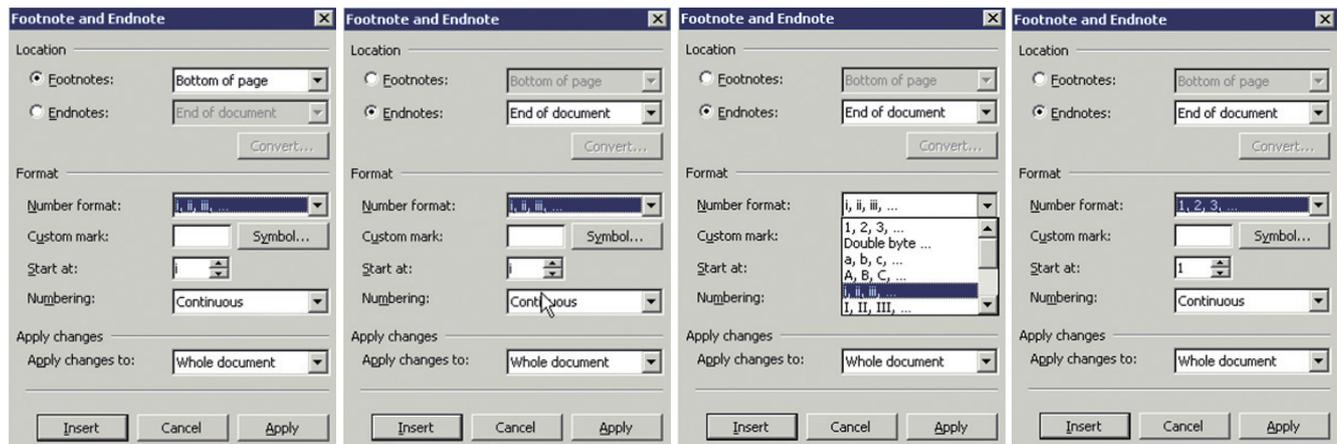
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Appendix 1: How to use "endnote" in Microsoft Word® 2003-2007

1. Use PUBMED to identify reference(s) to copy and paste into the reference list.
2. To insert a new reference. Click insert: choose reference - footnote - endnote - change number format to 1, 2, 3 (THE NUMBER FORMAT ONLY NEEDS TO BE DONE THE FIRST TIME, then it is automatic the next time).

Note: In the Word 2007® edition there is a separate heading for references, which directs you to insert endnote. Also, Microsoft for Mac has slight difference.



While pancreatic stents are useful for treatment of pancreatic diseases, inward (proximal) migration remains a problem.¹

References

1

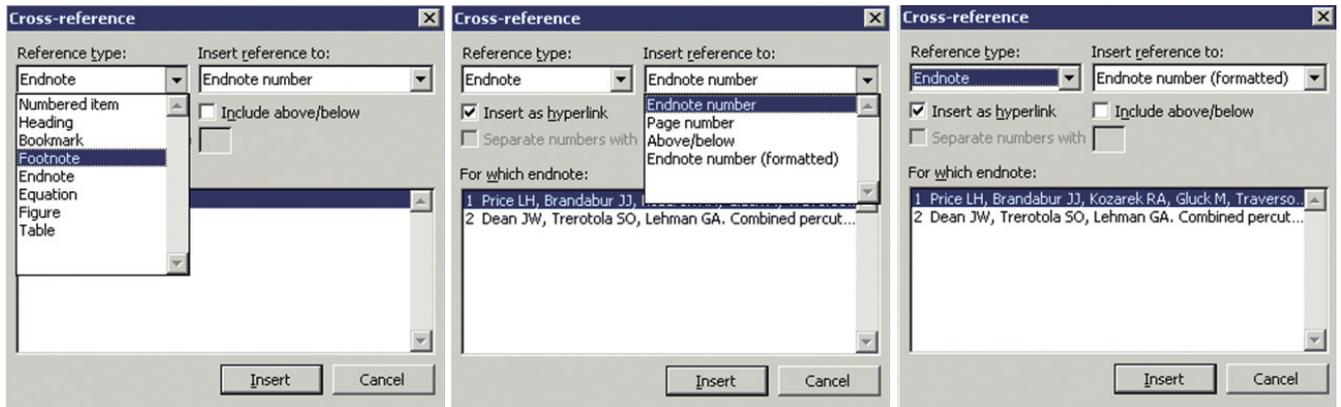
3. Paste the reference where it appears at the corresponding number at the end of the document.

While pancreatic stents are useful for treatment of pancreatic diseases, inward (proximal) migration remains a problem.¹

References

¹ Price LH, Brandabur JJ, Kozarek RA, Gluck M, Traverso WL, Irani S. Good stents gone bad: endoscopic treatment of proximally migrated pancreatic duct stents. *Gastrointest Endosc*. 2009 Jul;70(1):174-9.

- To use the same reference subsequently (cross reference)-Click insert: choose reference-cross reference. Under left column, "reference type", drop down to Endnote. Under the right column where it says "Endnote number" drop down to "Endnote number (formatted)". THIS LAST PART ONLY NEEDS TO BE DONE THE FIRST TIME, then it is automatic the next time). Note: In Word 2003, cross reference is also found here and directly opens up a list of references to select from or in the insert tab as word 1997.



- Before closing document or any time a cross reference is inserted-go to "file"- "print preview". This updates the references (automatically corrects the numbering).
- The references don't always appear on the screen but they are present-they will appear when the document is printed or can be seen under "view" at the top left then select "print layout" or "view" and select "footnotes". This is less troublesome with word 2007.
- Inserting multiple references requires placing put commas between the numbers or it will appear as ¹²³⁴ instead of ^{1,2,3,4}. Unfortunately this program does not allow references to appear as 1-4. The publisher will manage this. In some cases one may need to superscript the references or to apply brackets, as requested in the instructions for authors.
- To delete a reference, delete from the text, not in the reference list. This is important-or you will get the error below (#10).
- If the reference number is copied at the level of the text it can be pasted into another document text section and the reference will appear in the endnotes of the other manuscript (except if it is a cross reference).
- If "error, bookmark not defined" appears in the text where a reference should be it is either because the primary reference was deleted or it was moved in the text below the cross reference.
- This program does not automatically format the reference for a particular journal. For example the reference from PubMed "Chahal P, Baron TH, Poterucha JJ, Rosen CB. Endoscopic retrograde cholangiography in post-orthotopic liver transplant population with Roux-en-Y biliary reconstruction. Liver Transpl. 2007 Aug;13(8):1168-73." Needs to be manually changed (for most journals) to "Chahal P, Baron TH, Poterucha JJ, Rosen CB. Endoscopic retrograde cholangiography in post-orthotopic liver transplant population with Roux-en-Y biliary reconstruction. Liver Transpl 2007;13:1168-73."

Appendix 2: SAMPLE LETTER OF RESPONSE TO MAJOR REVISION

October 24, 2011

John G. Smith, M.D., Editor
 Jack. Jones, M.D., Associate Editor
 Academic University
 5500 Doe Avenue
 Somewhere, MN 55372

Dear Drs. Smith and Jones:

Enclosed is the revision of Manuscript Number OA 123456, "management of endoscopic jejunostomy feeding: a retrospective analysis". We have revised the manuscript in response to the reviewers' comments as follows:

Reviewer A

Comment 1

- a. **"The conclusion that D-PEJ is superior to PEG-J needs to be put into perspective. The comparison is not appropriate as a 20-French tube is compared to a 9-French J-tube."**

We agree that the comparison of the two techniques need to be put into perspective, since we are comparing two different caliber size tubes. This is now emphasized more in the discussion section (page 10, 3rd paragraph). We do feel however that it is an appropriate comparison since at our institution the PEG-J using a 9 french jejunal extension is the standard method of endoscopic jejunal placement. We are in the process of prospectively comparing the newer method of D-PEJ placement to the standard PEG-J method at our institution.

- b. **"Since there was a higher rate of proximal migration of the PEG-J, was the position of the J-tube (beyond the ligament of Treitz) confirmed by fluoroscopy (after withdrawal of the endoscope)?"**

All PEG-J tube placements were confirmed to be beyond the ligament of Treitz by fluoroscopy. Comments regarding this have been added to the methods section (page 7, paragraph 1).

- c. **"The authors need to comment on their previous study (Journal X 20010:65;11-115) where large bore jejunostomy tubes were placed with the help of an ultra thin endoscope. Ten-French to 12-French tubes were used."**

We have now included our previous study of transgastric jejunal tube placement (Journal X 20010:65;11-115) in the discussion section (beginning on page 11, paragraph 1, line 1). This method allows for larger J tubes to be placed endoscopically through existing mature gastrostomy tracts and is a relative easy and safe method, especially for centers that lack experience in D-PEJ placement. However, we feel that it is not valid to compare this population of patients to the patients in our study because the patients in the prior study had existing gastrostomies. These mature gastrostomy tracts allowed larger lumen jejunal tubes (24 fr) to be placed provided simultaneous gastric decompression is not required (single lumen transgastric PEJ). In the event that both gastric decompression and jejunal feeding are required, the jejunal port is usually 12 fr in size. The population of PEG-J patients in our current study did not have pre-existing gastrostomies and hence received the standard 20 fr PEG with 9 fr J extension.

Reviewer B**Major Comment 1**

- a. **“The study design is appropriate for this type of comparison, but is subject to inherent biases, especially in regards to patient selection. For example, patients in the PEG-J group were 10 years older and had significantly different indications (aspiration risk and GE cancer).”**

We agree that a retrospective study is subject to inherent biases, especially because of non-randomization. All efforts were made to minimize bias selection by reviewing all consecutive patients who received endoscopic jejunostomies from Jan 2009 to May 2011 and applying the inclusion/exclusion criteria outlined in the methods section. We have added comments on the inherent deficiencies of a non-randomized retrospective study in the discussion section (page 13, last paragraph). With regards to indications for jejunostomy, the main indications for both groups were gastroparesis and high aspiration. GE cancer is actually higher in the DPEJ group, not the PEG-J group.

- b. **“Did any of the PEG-J patients initially fail placement of a D-PEJ?”**

This question was also asked by reviewer A, comment 2a. Eleven of the failed DPEJ attempts underwent subsequent PEG-J placement. This has been added in the patients and methods section and the results section (page 4 bottom of paragraph 1, page 9 paragraph 2).

Minor Comment 1

“The authors mention that patients with a D-PEJ who require gastric decompression have a PEG placed in addition to the jejunal feeding tube. Although an acceptable approach, one wonders if the satisfaction of these patients would have been comparable to that of patients with 28/12 Fr. PEG-J tubes that allow for both feeding and decompression without the need for two abdominal incisions and two separate tubes.”

We agree with the statement that having a separate gastric decompression tube might be a source of patient dissatisfaction. We included in our discussion that in a previous study of DPEJ at our institution (Journal of Feeding 2010:85:980-990) that patient satisfaction with DPEJ was rated at 78%. This included patients who had gastric decompression PEGs. A 20 fr PEG decompression tube might provide better decompression than a PEG-J 28/12 fr, which has a 16 fr gastric port. We have added to the discussion section that a separate gastric decompression tube might be a disadvantage of the technique (page 13, paragraph 2).

Minor Comment 2

Table 1: consider deleting either the row “male” or the row “female”

We have changed this, as suggested.

Minor Comment 3

Figure 1: consider revising the axis legends

We revised the axis legends, as suggested.

Thank you for consideration of this manuscript.

Sincerely,

Todd H. Baron, MD