Writing a high quality research manuscript: Strategies and tips for Chinese authors

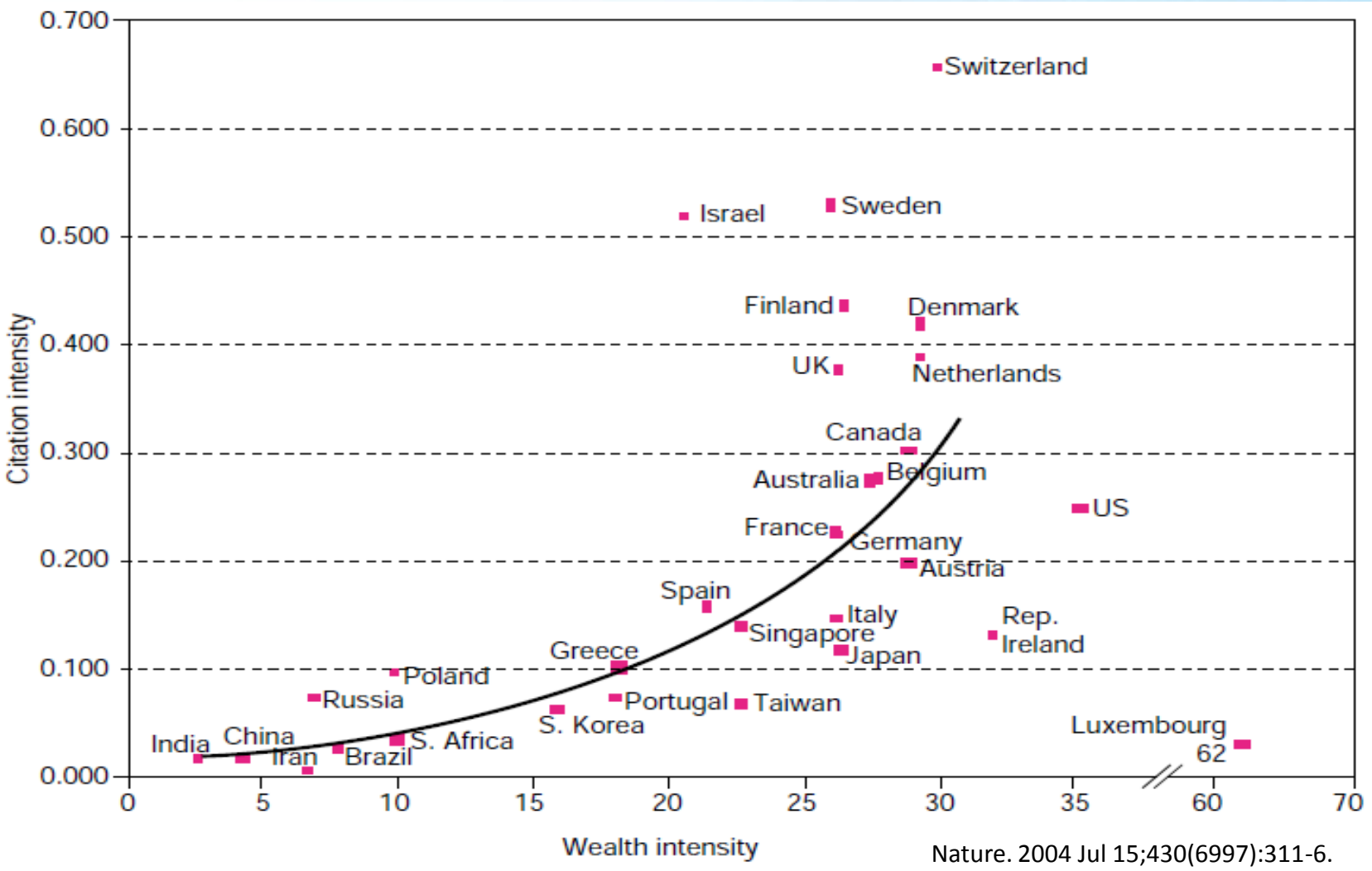
Dr. Bo Cui

Executive Editor, *Journal of Biomedical Research*

Distinguished Professor, *Nanjing Medical University*

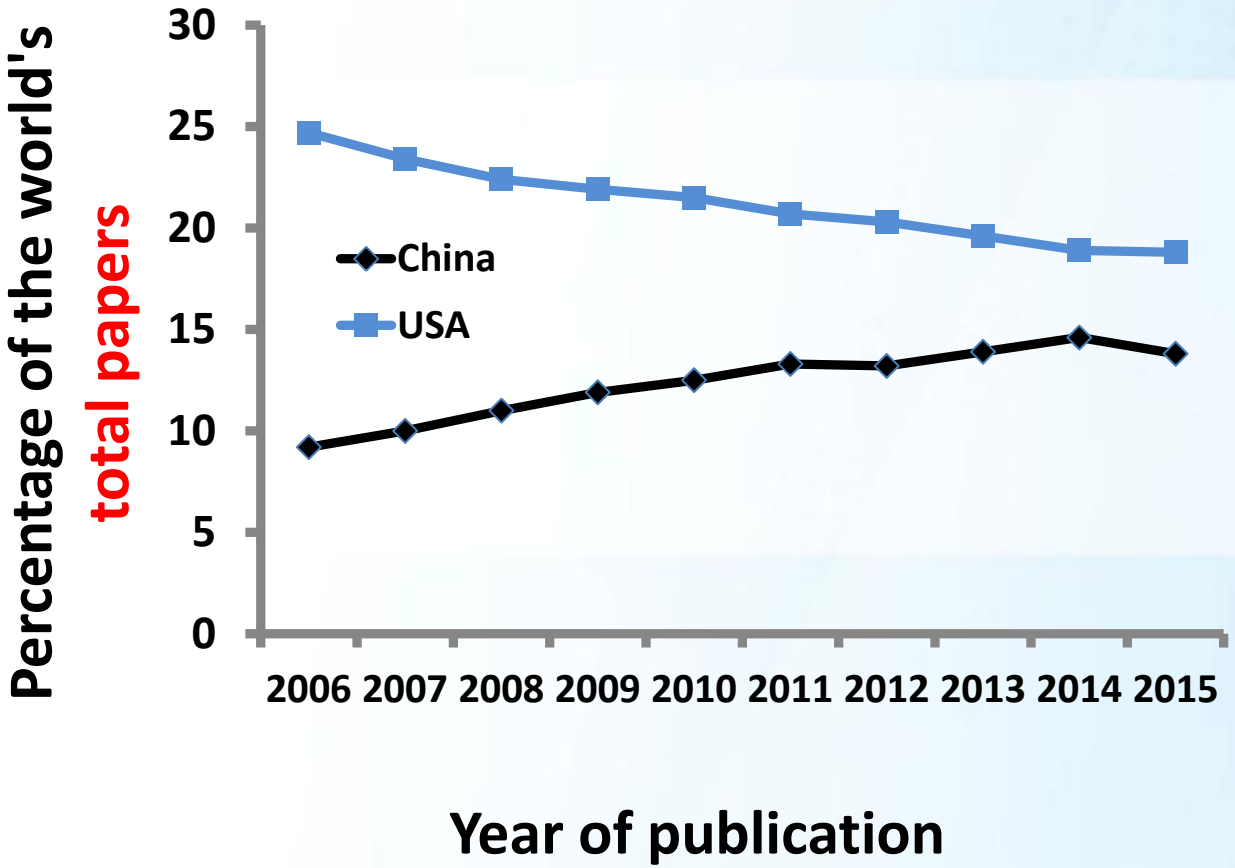
October 14, 2016, Beijing

The Scientific Impact of Nations

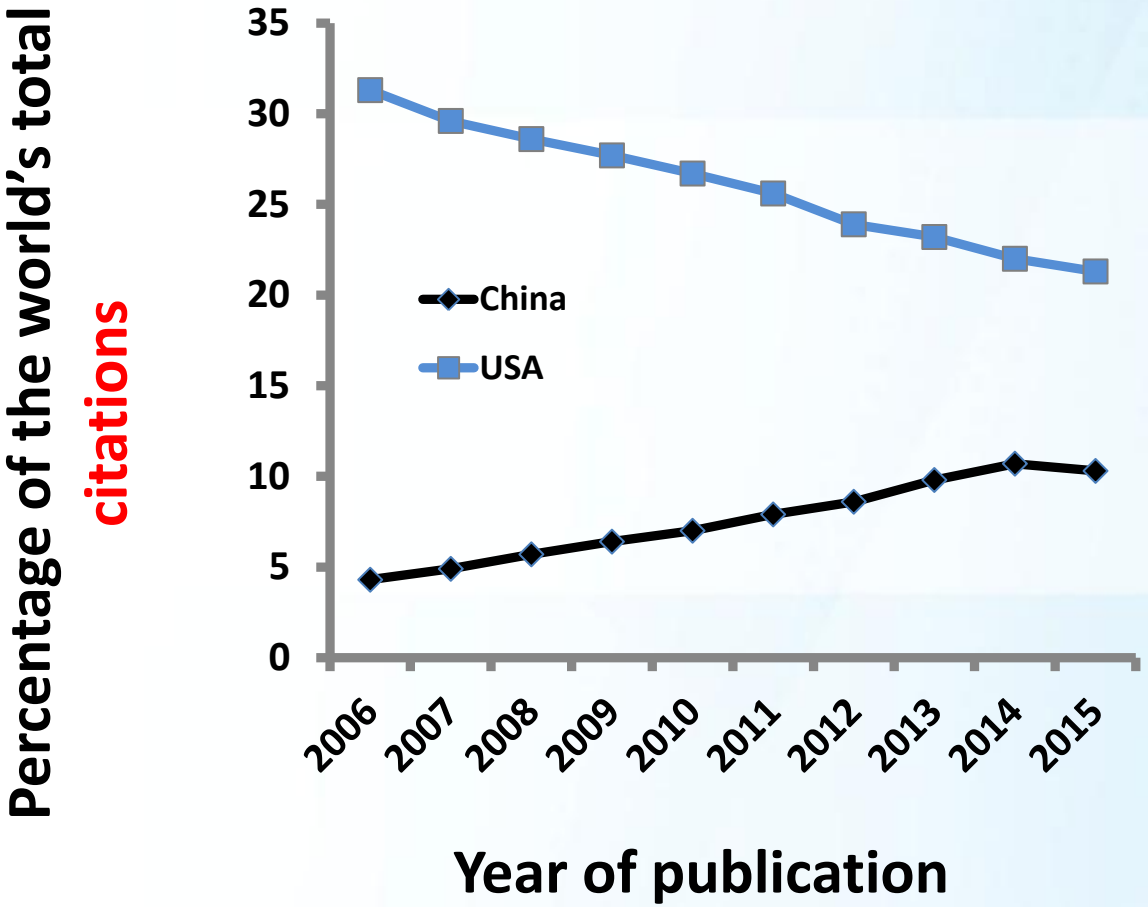


Nature. 2004 Jul 15;430(6997):311-6.

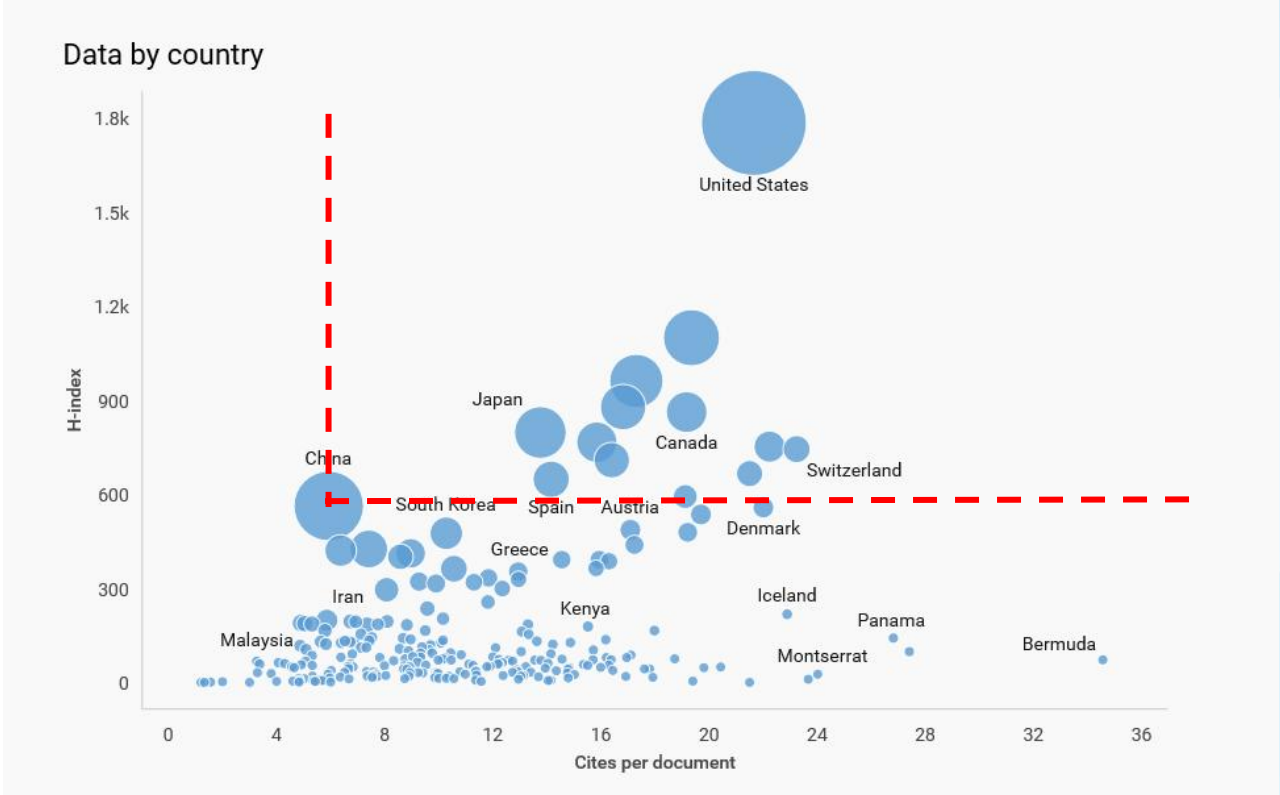
China: The Publication Boom



China: The Publication Boom



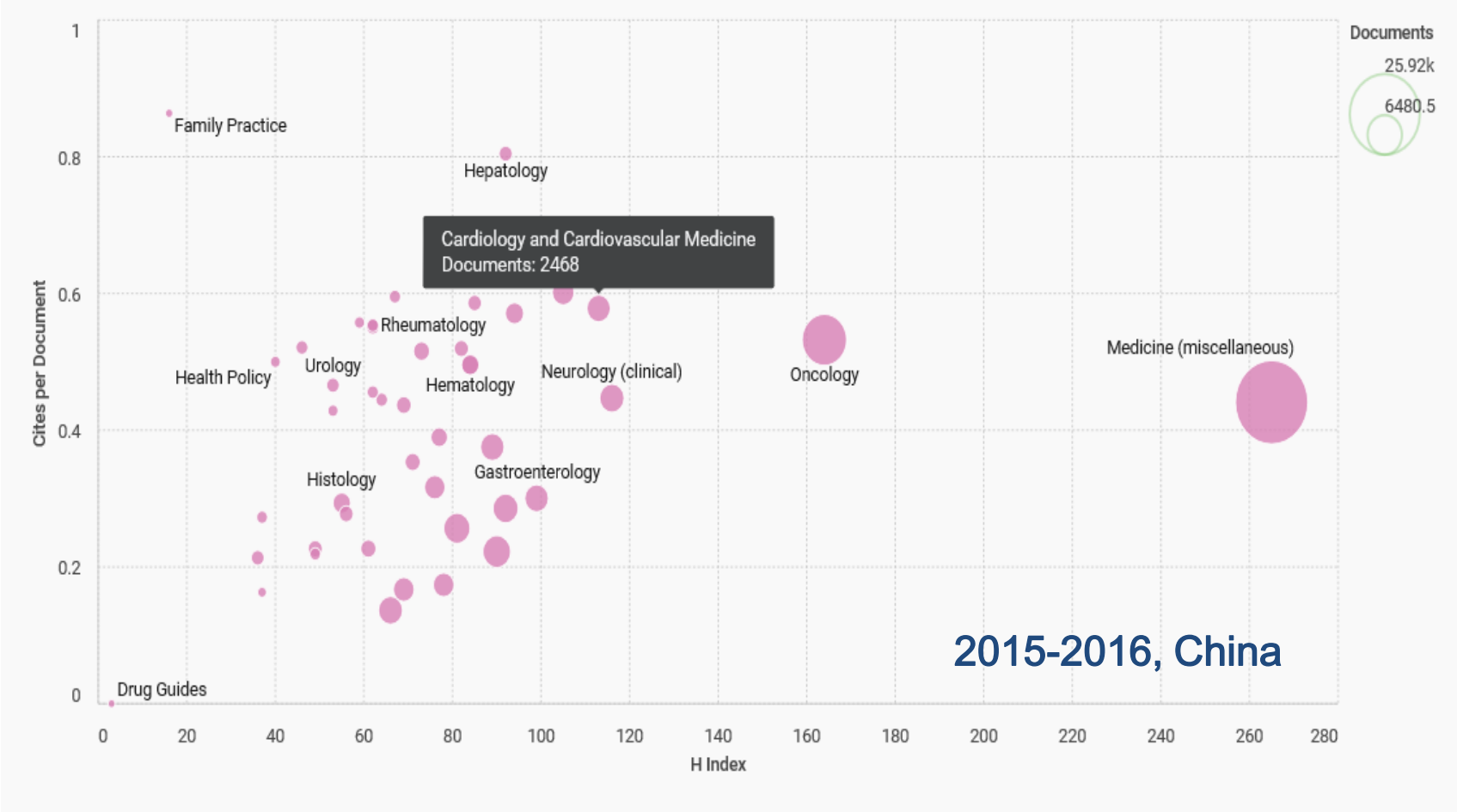
China: The Impact Lag



China Ranking in Cardiovascular Medicine

	China	Japan	USA
2000	27/116	2/2418	1/8409
2015	6/2468	4/3120	1/13960

Impact of Cardiovascular Medicine vs. Other Disciplines in China



Why Do We Publish?

- Dissemination (54%)
- Career prospects (20%)
- Improved funding (13%)
- Ego (9%)
- Patent protection (4%)
- Others (5%)

Bryan Coles (ed.) The STM Information System in the UK, BL Report 6123, Royal Society, BL, ALPSP, 1993

Where Do We Publish?

Author priorities for journal selection

- Impact factor
- Reputation
- Access to target audience
- Overall editorial standard
- Publication speed
- International coverage
- Open access

Where Do We Publish?

General journals

- NEJM
- Lancet
- JAMA
- BMJ
- Annals of Internal Medicine

Specialty journals

- JACC
- Circulation
- European Heart J
- Circulation Res

How to Write A High Quality Research Manuscript

What the editors/reviewers look for in a manuscript:

- **Novelty**
- **Significance**
- **Relevance**
- **Quality and novelty of the experimental design**
- **Data interpretation**
- **Style and presentation of the data.**

Introduction: Justify your study

The purpose of the introduction is to introduce the topic and engage the readers, and most importantly justify the current study.

Provide background information broad enough to allow readers to understand the current state of the art but also specific enough to allow readers to see **why the authors want to address a specific research question**.

- Stay focused. The most common problem in introduction is lack of focus.

Introduction: Justify your study

- **This is a time to show your sound scientific judgment.**
- A well-written introduction assists both the reader and the reviewer by moving the reader from what is known about a topic to what is unknown..
- Start from a large area of knowledge to the specific research question.
- Avoid a detailed history of the subject.
- Do not include detailed results from previous studies.

Methods: Brief But Sufficient and Reproducible

High quality research manuscript starts with a high quality study

- **Proper design is critical; analysis cannot rescue improper design.**
- **The choice of design depends on the goal of the study.**

Methods: Brief But Sufficient and Reproducible

Follow internationally accepted guidelines or conventions

- **Ethical considerations**
- **Clinical trial registrations**
- **Consort statement**

Methods: Brief But Sufficient and Reproducible

- This section explains how you have obtained your study results.

  -What has been done?
  -What did you look for?
  - How was it done?
- For established methods, just provide a reference.
- For modified methods, provide sufficient details.
- The methods (results) should be reproducible.
- Logical order-usually chronological or the order of presentation of results.

Presenting your results effectively

- What are your **major** findings?
- Answer all points raised in Materials and Methods.
- No new parameters.
- No mismatch in numbers between text and tables/figures.
- Follow a logical sequence based on the tables and figures presenting the findings to answer the question or hypothesis.

Presenting your results effectively

- Figures should have a sufficiently detailed description (a legend), providing the reader sufficient information to know how the data were produced.
- If the table or figure contains only one or two items, the information can be summarized instead.
- **Save your images in the highest resolution!!!**
- Show the figures to your colleagues and ask for their suggestions before you submit.

Writing an effective discussion

- Recapitulate major findings .
- Discuss major findings in light of available data .
- Discuss important minor findings .
- Provide alternative explanations
- What are the strengths and limitations of the study ?
- Implications of findings .

JAMA The Journal of the American Medical Association

August 19, 1998, Vol 280, No. 7 >

< Previous Article Next Article >

Original Contribution | August 19, 1998

Randomized Trial of Estrogen Plus Progestin for Secondary Prevention of Coronary Heart Disease in Postmenopausal Women FREE

Stephen Hulley, MD; Deborah Grady, MD; Trudy Bush, PhD; Curt Furberg, MD, PhD; David Herrington, MD; Betty Riggs, MD; Eric Vittinghoff, PhD;

JAMA. 1998;280(7):605-613. doi:10.1001/jama.280.7.605.

ABSTRACT

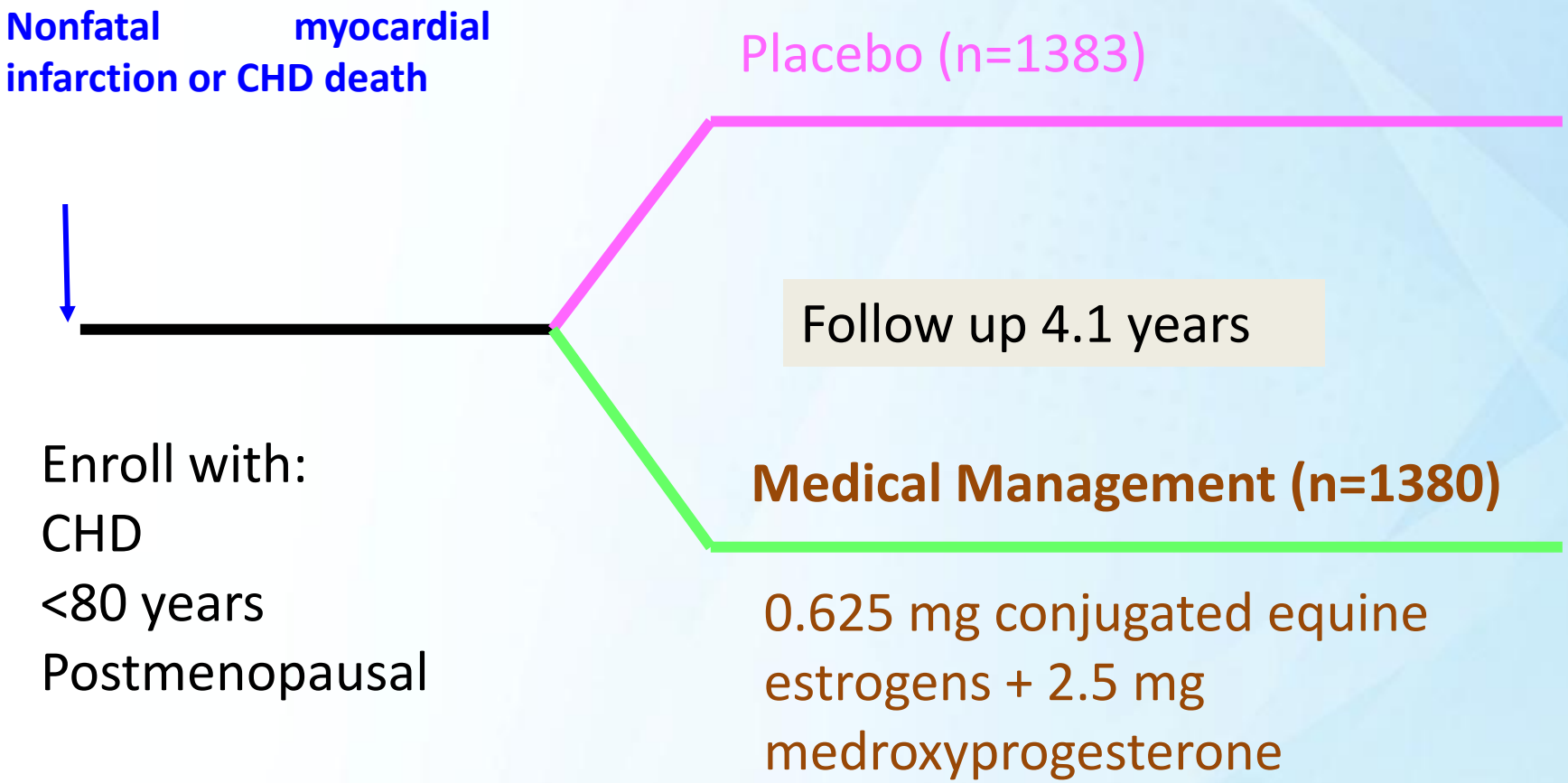
The Heart and Estrogen/progestin Replacement Study (HERS)

MANY OBSERVATIONAL studies have found lower rates of coronary heart disease (CHD) in women who take postmenopausal estrogen than in women not receiving this therapy.[1-5] This association has been reported to be especially strong for secondary prevention in women with CHD, with hormone users having 35% to 80% fewer recurrent events than nonusers.[6-12] If this association is causal, estrogen therapy could be an important method for preventing CHD in postmenopausal women. However, the observed association between estrogen therapy and reduced CHD risk might be attributable to selection bias if women who choose to take hormones are healthier and have a more favorable CHD profile than those who do not.[13-15] Observational studies cannot resolve this uncertainty.

The Heart and Estrogen/progestin Replacement Study (HERS)

The study question:
Does estrogen plus progestin therapy alters the risk for CHD events in postmenopausal women with established coronary disease?

The Heart and Estrogen/progestin Replacement Study (HERS)

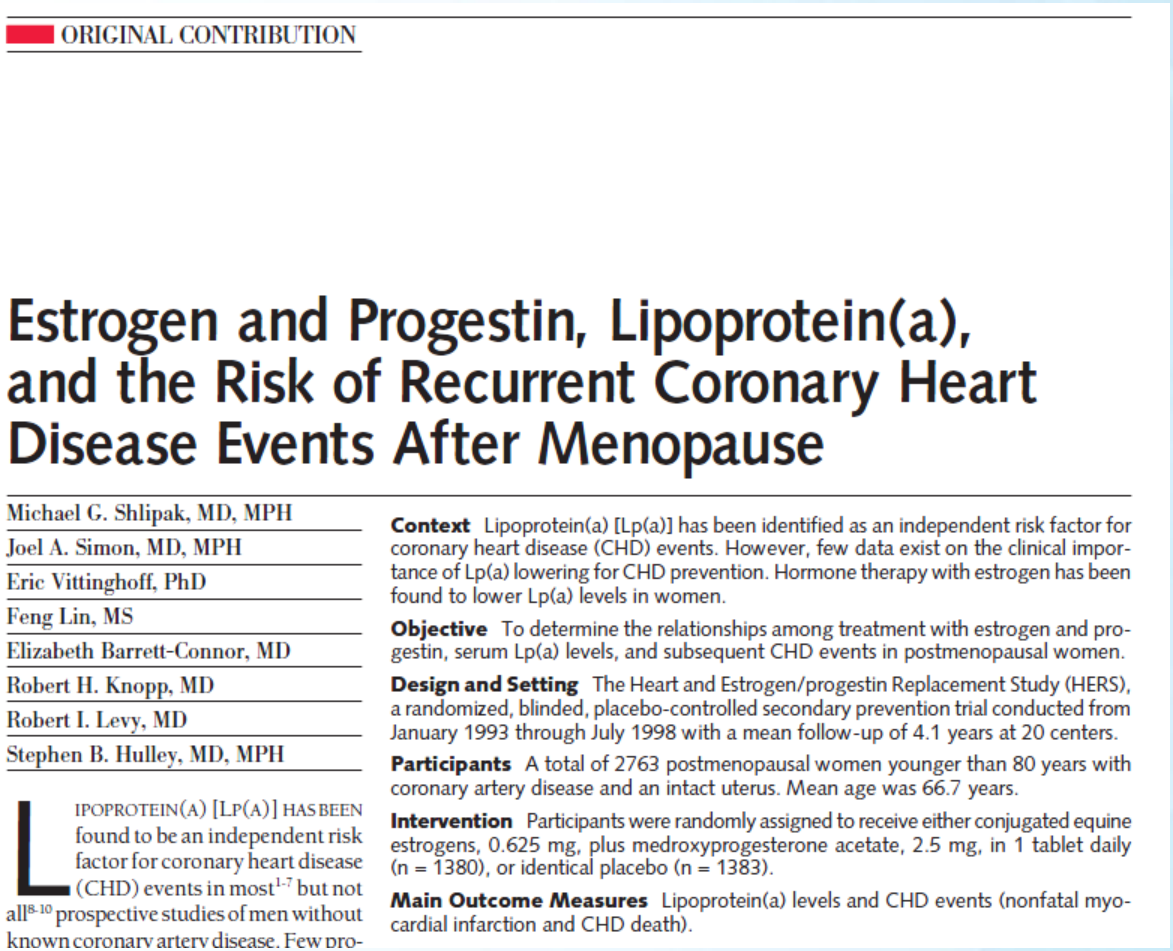


The Heart and Estrogen/progestin Replacement Study (HERS)

The major findings:

In postmenopausal women with established coronary disease and an average age of 66.7 years, daily use of conjugated equine estrogens and medroxyprogesterone acetate did not reduce the overall risk for MI and CHD death or any other cardiovascular outcome during an average of 4.1 years of follow-up. This therapy did increase the risk of venous thromboembolic events and gallbladder disease.

The Heart and Estrogen/progestin Replacement Study (HERS)



ORIGINAL CONTRIBUTION

Estrogen and Progestin, Lipoprotein(a), and the Risk of Recurrent Coronary Heart Disease Events After Menopause

Michael G. Shlipak, MD, MPH
Joel A. Simon, MD, MPH
Eric Vittinghoff, PhD
Feng Lin, MS
Elizabeth Barrett-Connor, MD
Robert H. Knopp, MD
Robert I. Levy, MD
Stephen B. Hulley, MD, MPH

Context Lipoprotein(a) [Lp(a)] has been identified as an independent risk factor for coronary heart disease (CHD) events. However, few data exist on the clinical importance of Lp(a) lowering for CHD prevention. Hormone therapy with estrogen has been found to lower Lp(a) levels in women.

Objective To determine the relationships among treatment with estrogen and progestin, serum Lp(a) levels, and subsequent CHD events in postmenopausal women.

Design and Setting The Heart and Estrogen/progestin Replacement Study (HERS), a randomized, blinded, placebo-controlled secondary prevention trial conducted from January 1993 through July 1998 with a mean follow-up of 4.1 years at 20 centers.

Participants A total of 2763 postmenopausal women younger than 80 years with coronary artery disease and an intact uterus. Mean age was 66.7 years.

Intervention Participants were randomly assigned to receive either conjugated equine estrogens, 0.625 mg, plus medroxyprogesterone acetate, 2.5 mg, in 1 tablet daily (n = 1380), or identical placebo (n = 1383).

Main Outcome Measures Lipoprotein(a) levels and CHD events (nonfatal myocardial infarction and CHD death).

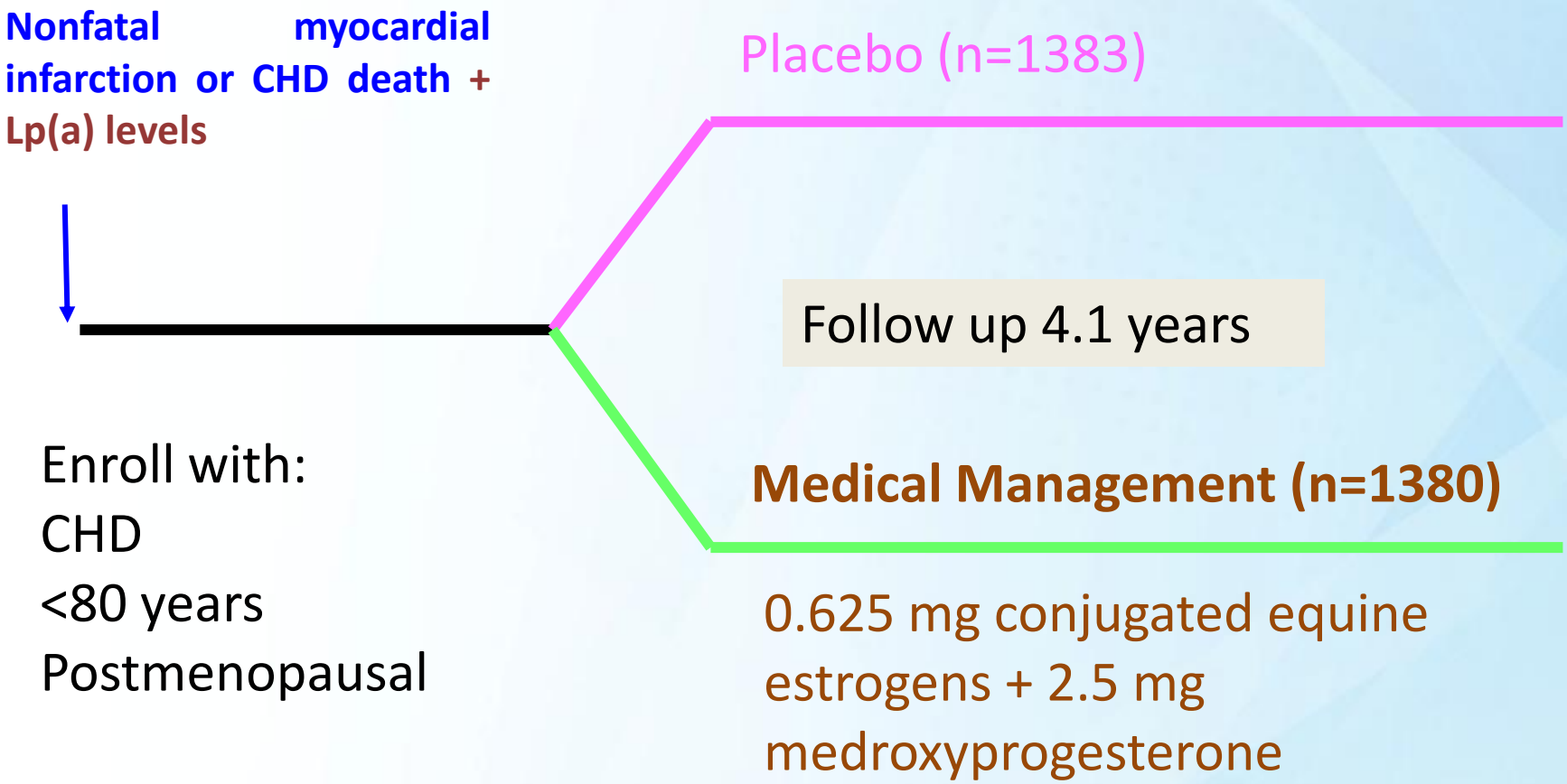
LIPOPROTEIN(A) [LP(A)] HAS BEEN found to be an independent risk factor for coronary heart disease (CHD) events in most[1-7] but not all[8-10] prospective studies of men without known coronary artery disease. Few pro-

The Heart and Estrogen/progestin Replacement Study (HERS)

The study question:

What are the relationships among treatment with estrogen and progestin, serum Lp(a) levels, and subsequent CHD events in postmenopausal women?

The Heart and Estrogen/progestin Replacement Study (HERS)

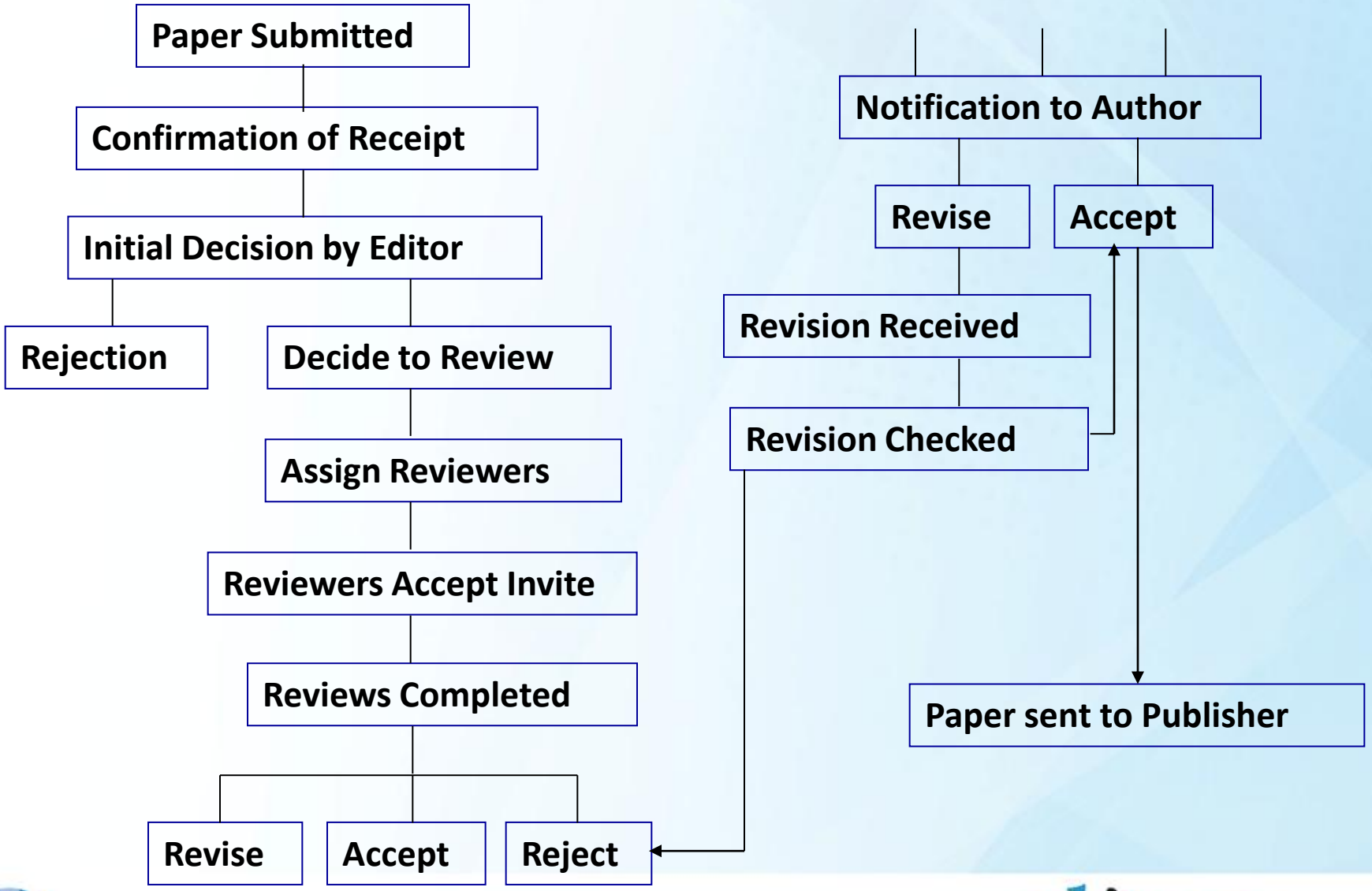


The Heart and Estrogen/progestin Replacement Study (HERS)

Lp(a) is an independent risk factor for recurrent CHD in postmenopausal women and that treatment with estrogen and progestin lowers Lp(a) levels.

Estrogen and progestin therapy appears to have a more favorable effect (relative to placebo) in women with high initial Lp(a) levels than in women with low levels.

The Editorial Process



Top 10 Reasons Why Manuscripts Are Not Published

10. Picking the wrong journal
9. Submitting a manuscript in a format that does not match what the journal publishes
8. Not following the manuscript preparation instructions
7. Poor writing
6. Getting carried away in the discussion
5. Suboptimal reporting of the results
4. Inadequate description of the methods
3. Poor study design
2. **Failure to revise and resubmit following peer review**
1.Failure to write and submit a full manuscript after presenting the abstract.

Respiratory Care (2004) 40:1246

How to Respond to Critiques

Dear Dr. XXX

: Your manuscript entitled, "Treatment of Femoral Head Loss Secondary Septic Arthritis in Infancy With Modification of Albee's Arthroplasty," number JBJS-D-09-00201, has been reviewed by two experienced pediatric orthopaedic surgeons, as well as by myself. The comments of these clinical reviewers are included below. In addition, your manuscript was reviewed by one of the methodology and statistics editors for JBJS and the comments of that editor are also below.

Based on the reviews, the decision has been made to not accept your manuscript for publication in JBJS. I know this is not the decision you desired, but I hope that the comments of the three reviewers will be of help to you as you revise your manuscript for submission to another orthopaedic journal. Thank you for submitting your research report to JBJS for our consideration.

In accordance with our Copyright Transfer and Author Agreement, The Journal hereby re-conveys to the authors, without any representation, warranty or recourse, all of the rights (including copyrights) in the Work that were assigned to The Journal by the authors under that Agreement and are now held by The Journal.

Sincerely,

How to Respond to Critiques

- Your letter to the editor should start politely.
- Response letters should state that the author thanks the reviewers for their time and effort and their contributions to the work.
- Address the comments of the reviewers and/or conduct the recommended experiments strengthened the work.

How to Respond to Critiques

- August 23, 2009
- Dear Dr. XXX
- Thank you for your having our manuscript (JBJS-D-09-00201) entitled "Treatment of Femoral Head Loss Secondary Septic Arthritis in Infancy with Modification of Albee's Arthroplasty" reviewed. We regret to learn the decision by JBJS not to accept our manuscript. However, we are very encouraged by the positive comments by the reviewers who have pointed out problems and deficiencies with the manuscript, but most of all they recognize the value of our work, the publication of which will be of great help to our fellow pediatric orthopedic surgeons in managing the severe sequelae of septic arthritis of the hip in young children.

- Start politely and thanks the editor for sending the manuscript for review.

- Be positive and emphasize the value/significance of your work.

How to Respond to Critiques

- We have revised the manuscript in accordance with the suggestions by the reviewers. In it, we have addressed almost all of the concerns by the reviewers and have incorporated answers to their questions in the revised manuscript. In addition, we have enlisted the help of Dr. Bo Cui at the Department of Surgery, Duke University Medical Center, Durham, NC, USA in the final revision of the manuscript. We have also sought the advice for statistical analysis from Dr. Xiutang Cao, a statistician at the Fourth Military Medical University China. We would like to ask your kind reconsideration of the manuscript either as a new manuscript or as a revised manuscript and we would also like to have the same reviewers review the manuscript if possible. Though septic arthritis of the hip in young children is uncommon, it is often devastating to those who have the disease. Our experience and the results of our retrospective study of modified Albee's arthroplasty in young patients with the severe sequelae of septic arthritis of the hip will be useful for pediatric orthopedic surgeons all over the world who face this problem rarely.

- Address comments/concerns by the reviewers.
- Be specific about your request.
- Emphasize the value of your work

How to Respond to Critiques

- Again all the authors have read the final manuscript and agreed to its publication if accepted by the journal. No duplicate publication or submission of the manuscript has been made elsewhere.
- We have detailed our responses to the reviewers and also documented the changes in the responses that are appended at the end of this letter.
- If you or the reviewers have any questions, please do not hesitate to contact me.
- Thank you for your consideration of our manuscript.

- Indicate that you have made appropriate changes in the manuscript.

How to Respond to Critiques

- **The goal is to move the work forward and figure out how to satisfy the reviewer.**

How to Respond to Critiques

A commentary by Paul D. Sponseller, MD, is available at www.jbjs.org/commentary and as supplemental material to the online version of this article.

Evaluation of the Modified Albee Arthroplasty for Femoral Head Loss Secondary to Septic Arthritis in Young Children

By Xue-dong Li, MD, PhD, Bin Chen, MD, Jun Fan, MD, PhD, Chuang-yi Zheng, MD, Dong-xin Liu, MD, PhD, Hu Wang, MD, PhD, Xue Xia, MD, Shi-jun Ji, MD, and Shi-xin Du, MD, PhD

Investigation performed at the 1st Affiliated Hospital, Medical College of Shantou University, Shantou, Guangdong, China

Background: Surgical treatment options for femoral head deficiency in infants secondary to septic arthritis of the hip are varied and associated with uncertain long-term outcomes. The modified Albee arthroplasty has been considered an acceptable procedure; however, the long-term outcomes of this procedure have not been reported, to our knowledge. We evaluated the long-term outcomes of the modified Albee arthroplasty in young patients with severe sequelae of septic arthritis of the hip.

Methods: We retrospectively studied twenty-one children (twenty-one hips) in whom Choi type-IVB sequelae of septic arthritis of the hip had been treated with a modified Albee arthroplasty and six patients with the same sequelae who had been managed with simple observation. The Trendelenburg sign, pain, the range of motion, hip function, the Harris hip score, and limb-length discrepancy were assessed clinically. Remodeling of the femoral head, hip stability, and arthritic changes in the hip were evaluated radiographically.

How to Respond to Critiques

Commentary & Perspective on "Evaluation of the Modified Albee Arthroplasty for Femoral Head Loss Secondary to Septic Arthritis in Young Children" by Xue-dong Li, MD, PhD, et al. Paul D. Sponseller, MD*, Johns Hopkins Medical Institutions, Baltimore Maryland

The article is also useful in part because it contains a detailed description of the procedure. This instruction, in combination with the decade-long follow-up of this uncommon problem, provides valuable information to guide us. The series of three line drawings illustrating the procedure is practical and ***helps make this a landmark paper.***

How to Respond to Critiques

Evaluation of the Modified Albee Arthroplasty for Femoral Head Loss Secondary to Septic Arthritis in Young Children

Surgical Technique

By Xue-dong LI, MD, PhD, Bin Chen, MD, Shao-wei Luo, MD, Shi-jun JI, MD, and Shi-xin Du, MD, PhD

Investigation performed at the 1st Affiliated Hospital, Medical College of Shantou University, Shantou, Guangdong, China

The original scientific article in which the surgical technique was presented was published in JBJS Vol. 92-A, pp. 1370-80, June 2010

ABSTRACT FROM THE ORIGINAL ARTICLE

BACKGROUND: Surgical treatment options for femoral head deficiency in infants secondary to septic arthritis of the hip are varied and associated with uncertain long-term outcomes. The modified Albee arthroplasty has been considered an acceptable procedure; however, the long-term outcomes of this procedure have not been reported, to our knowledge. We evaluated the long-term outcomes of the modified Albee arthroplasty in young patients with severe sequelae of septic arthritis of the hip.

Contact Information

Website: http://wkauthorservices.editage.com/
Email: wkauthorservices@editage.com

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Thank you!