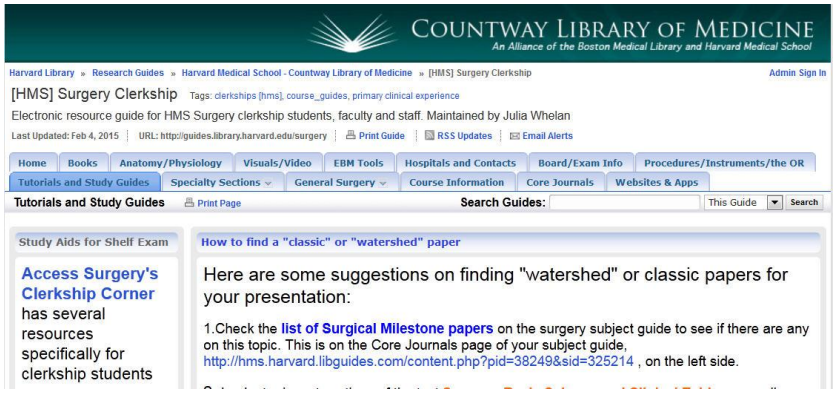
Bariatric Surgery: tips on finding the "classic, most important studies, for your presentation"

First …Go to the Surgery Subject Guide URL: http://hms.harvard.libguides.com/surgery
Click on the **"Tutorials and Study Guide** tab.



The main box on this page has my tips on how to find the "classic articles" that Dr. Osteen wants. The bibliographies in the 2 books mentioned: **Surgery: Basic science and clinical evidence** and **Sabistons's Textbook of Surgery** are extremely helpful so I recommend looking at both of these.

Surgery: basic science and clinical evidence is on reserve at Countway (last copy was stolen) and also online.(again see HOLLIS for latest link) However the online search function from this publisher leaves much to be desired so you may want to look at this excellent source in print.

Most of the papers referenced should be available in our collection of older journals on L1 and L2 or online**.** ***Remember Dr. Osteen wants students not just to cite the papers but to read them***. After you have followed these steps, try the other suggestions I listed in this subject guide including the special sources listed below.

Check references to chapters **in these online textbooks on Bariatric Surgery**
The ASMBS Textbook of Bariatric Surgery volumes 1 and 2
Volume 1: http://link.springer.com.ezp-prod1.hul.harvard.edu/book/10.1007/978-1-4939-1206-3 - the pathop history chapters are good background
Volume 2: http://link.springer.com.ezp-prod1.hul.harvard.edu/book/10.1007/978-1-4939-1197-4

Innovative technologies and non-invasive procedures in bariatric surgery / Jérôme Dargent.
http://nrs.harvard.edu/urn-3:hul.ebookbatch.GEN_batch:ocn835216300

***Buchwald's Atlas of Metabolic & Bariatric Surgical Techniques and Procedures – read the introducti a brief history and references classic papers**

http://nrs.harvard.edu/urn-3:hul.ebook:ELSD_9781416031062

Sabiston's is online (link to latest edition from HOLLIS) see selections below
http://nrs.harvard.edu/urn-3:hul.ebookbatch.GEN_batch:ocn780445116

Sabistons Selected References -- Good annotations that explain the importance of the paper:

Buchwald H, Avidor Y, Braunwald E, et al: **Bariatric surgery: A systematic review and meta-analysis.** *JAMA* 2004; 292:1724-1737.The authors reviewed the literature and selected 136 studies (22,094 patients) that they reviewed and subjected to meta-analysis. Bariatric surgery was found to be very effective in weight loss and resulted in improvement or cure of serious comorbid conditions (diabetes, dyslipidemia, hypertension, and sleep apnea) in the majority of patients. This comprehensive meta-analysis provides the most compelling data on the effectiveness and beneficial results of bariatric surgery in the literature.

Christou NV, Sampalis JS, Liberman M, et al: **Surgery decreases long-term mortality, morbidity, and health care use in morbidly obese patients**. *Ann Surg* 2004; 240:416-423.discussion 423-414 In a study comparing matched control subjects with subjects who underwent bariatric surgery in Canada, Christou and coauthors demonstrated that weight loss surgery reduced the relative risk for mortality by 89% (95% confidence interval, 73% to 96%) 5 years after surgery. This is one of the substantial arguments for the effectiveness of bariatric surgery to not only reduce weight but to also ameliorate or cure the comorbid conditions, which increases survival.

Maggard MA, Shugarman LR, Suttorp M, et al: **Meta-analysis: Surgical treatment of obesity**. *Ann Intern Med* 2005; 142:547-559.The authors assessed 147 studies on bariatric surgery to analyze weight loss, mortality, and complications. They found that laparoscopic gastric bypass resulted in fewer wound complications, incisional hernias, and respiratory complications than the open approach did. They concluded from the analysis of weight loss and resolution of comorbid conditions that bariatric surgery was more effective than medical treatment in patients with a BMI of 40 kg/m^2 or greater. This study amplifies the growing body of data supporting bariatric surgery as being safe and effective.

Nguyen NT, Goldman C, Rosenquist CJ, et al**: Laparoscopic versus open gastric bypass: A randomized study of outcomes, quality of life, and costs**. *Ann Surg* 2001; 234:279-289.discussion 289-291 The first prospective randomized trial comparing laparoscopic with open gastric bypass. Patients were monitored for 1 year, at which time weight loss with both approaches was comparable (68% loss of excess weight for laparoscopic RYGB versus 62% loss of excess weight for open RYGB), but the laparoscopic approach had a shorter length of hospitalization and more rapid return to activities of daily living than the open procedure did.

Sjostrom L, Lindroos AK, Peltonen M, et al: **Lifestyle, diabetes, and cardiovascular risk factors 10 years after bariatric surgery.** *N Engl J Med* 2004; 351:2683-2693.This study compared a group of patients undergoing bariatric surgery with a group of matched control subjects and monitored them for 10 years. They found an 80% decrease in the annual mortality of diabetic individuals in the surgical weight loss group as compared with control patients not undergoing surgery (9% mortality at 9 years versus 28% mortality in the control group). This is the best long-term study indicating that bariatric surgery results in sustained weight loss, resolution of comorbid conditions, and increased survival in comparison to standard medical treatment.

From PubMed

1. Cochrane Database Syst Rev. 2014 Aug 8;8:CD003641.
Surgery for weight loss in adults.
Colquitt JL(1), Pickett K, Loveman E, Frampton GK.
Update of Cochrane Database Syst Rev. 2009;(2):CD003641.

2. Dig Surg. 2014;31(1):13-24. doi: 10.1159/000354319. Epub 2014 May 8.
Physiological mechanisms behind Roux-en-Y gastric bypass surgery.
Lutz TA(1), Bueter M. PMID: 24819493 [PubMed - indexed for MEDLINE]

3. JAMA Surg. 2014 Mar;149(3):275-87. doi: 10.1001/jamasurg.2013.3654.
The effectiveness and risks of bariatric surgery: an updated systematic review and meta-analysis, 2003-2012.
Chang SH(1), Stoll CR(1), Song J(2), Varela JE(3), Eagon CJ(3), Colditz GA(1).
IMPORTANCE: The prevalence of obesity and outcomes of bariatric surgery are well established. However, analyses of the surgery impact have not been updated and comprehensively investigated since 2003. … CONCLUSIONS AND RELEVANCE: Bariatric surgery provides substantial and sustained effects on weight loss and ameliorates obesity-attributable comorbidities in the majority of bariatric patients, although risks of complication, reoperation, and death exist. Death rates were lower than those reported in previous meta-analyses. PMCID: PMC3962512 [Available on 2015-03-01]
PMID: 24352617 [PubMed - indexed for MEDLINE]

4. Lim RB, Blackburn GL, Jones DB. Benchmarking best practices in weight loss surgery. Curr Probl Surg. 2010 Feb;47(2):79-174. Review. PubMed PMID: 20103467; PubMed Central PMCID: PMC3134527.

5. Picot J, Jones J, Colquitt JL, Gospodarevskaya E, Loveman E, Baxter L, Clegg AJ. The clinical effectiveness and cost-effectiveness of bariatric (weight loss) surgery for obesity: a systematic review and economic evaluation. Health Technol Assess. 2009 Sep;13(41):1-190, 215-357, iii-iv. Review. PubMed PMID: 19726018.

6.: Blackburn GL, Hu FB, Hutter MM. Updated evidence-based recommendations for best practices in weight loss surgery. Obesity (Silver Spring). 2009 May;17(5):839-41. Epub 2009 Feb 19. PubMed PMID: 19396062.

7. Lautz DB, Jiser ME, Kelly JJ, Shikora SA, Partridge SK, Romanelli JR, Cella RJ, Ryan JP. An update on best practice guidelines for specialized facilities and resources necessary for weight loss surgical programs. Obesity (Silver Spring). 2009 May;17(5):911-7. Epub 2009 Feb 19. Review. PubMed PMID: 19396071.

8. Greenberg I, Sogg S, M Perna F. Behavioral and psychological care in weight loss surgery: best practice update. Obesity (Silver Spring). 2009 May;17(5):880-4. Epub 2009 Feb 19. PubMed PMID: 19396066.

PubMed strategies

Try these search strategies to find meta-analyses or systematic reviews on Bariatric surgery methods

"Bariatric Surgery/methods"[majr] Limits: **Meta-Analysis, English**
Also look for meta-analyses, systematic reviews and use subheadings [adverse effects] or [history]. We found papers dealing with the physiology of bariatric surgery, the outcomes (such as diabetes remission, or return of obesity) and nutritional deficits.

Use the history subheading to find important studies

To find articles on the **history of bariatric surgery** which will also identify important studies try: “Bariatric Surgery/history” Yields 51
13 are available in this NCBI collection
http://www.ncbi.nlm.nih.gov/sites/myncbi/collections/public/1rESce_oVZh80d7HIHlQfoS/

For papers **comparing procedures** try: "Bariatric Surgery/methods"[Majr] AND "Comparative Study" [Publication Type] Limits: Meta-Analysis

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Most cited studies

To find **most cited studies search the Web of Science:**
The strategy below was searching for studies on open vs. laparoscopic, complications and patient selection. You can create your own variations on these subtopics but remember there is no indexing in WOS so use any common synonyms connected with OR for more comprehensive retrieval. I limited to the “category surgery” since Dr. Osteen stated he is interested in the surgeons’ point of view on these topics.

Topic=("bariatric surgery") AND Topic=(laparoscopic OR complications OR "patient selection")

Refined by: Web of Science Categories=(SURGERY)

Finally sort the results by “Most cited to least cited” and then look at the set of most cited studies.

Related topics

For studies on the risk of depression in post bariatric surgery papers try this PubMed strategy:

“depressive disorders”[mesh] AND “Obesity/surgery”[mesh] AND (Risk Factors[mesh] OR Treatment Outcome[mesh]) yields 9 studies

Julie Whelan, Reference & Education Librarian Countway Library
2/25/15