Ten Best Papers of 2012 - General Surgery

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DISCLOSURES
NONE

Methodology - Proposed
- Contact colleagues to identify most significant papers in their field
- Search Google Scholar for the most cited papers

Methodology - Actual
- Review 5 journals (impact factor)
  - NEJM
  - Ann Surg
  - British J Surg
  - Arch Surg
  - JACS
- Download and print based on abstract

Methodology - Actual
- Inclusions
  - General interest
  - Entertainment value
  - Confirms my beliefs and bias

Methodology - Actual
- Exclusions
  - Laparoscopic approach to sebaceous cysts
  - Lies, damned lies, statistics
  - Refutes my beliefs and bias
Laparoendoscopic Rendezvous Versus Preoperative ERCP and Laparoscopic Cholecystectomy for the Management of Cholecysto-Choledocholithiasis: Interim Analysis of a Controlled Randomized Trial

George Tzovaras MD, Ioannis Baloyiannis MD; Eleni Zachari MD; Dimitris Symeonidis MD; Dimitris Zacharoulis MD; Andreas Kapsoritakis MD; George Paroutoglou MD; Spyros Potamianos MD


Rendezvous
- ERCP then lap chole vs lap chole plus intraop ERCP
- Positive preop MRCP
- Pass catheter in duodenum, grab with snare
- Remove wire, leave sphincterotome in CBD, finish lap chole (ensures CBD cannulation, no retrograde contrast injection)
- Lower postop amylase (no pancreatitis), ~ all successful

Risk and Cost-effectiveness of Surveillance Followed by Cholecystectomy for Gallbladder Polyps

Vaux Cairns MBChB, Christopher P. Neal MD, MRCS, Ashley R. Dennison MD, FRCS, Giuseppe Garcea MD, FRCS

Arch Surg 2012;147(12)

Gall bladder polyps
- N = 467 followed (2000 – 2011)
- 85% < 1 cm
- 6.6% increase in size
- 3.7% had “meaningful” polyp (chole group)
- All had increased in size, only one cancer in series

Conclusion:
Only survey polyps > 5mm
Surgery for polyps > 1 cm or interval growth

A Multicenter Randomized Clinical Trial of Primary Anastomosis or Hartmann’s Procedure for Perforated Left Colonic Diverticulitis with Purulent or Fecal Peritonitis

Christian Eugen Oberkofler MD, Andreas Rickenbacher MD, Dimitri Aristotele Raptis MD, MSc, Kuno Lehmann MD, Peter Villiger MD, Christian Buchli MD, Felix Grieder MD, Hans Gelpke MD, Marco Decurtins MD, Adrien A. Tempia-Caliera MD, Nicolas Demartines MD, Dieter Hahnloser MD, Pierre-Alain Clavien MD, PhD, and Stefan Breitenstein MD

Diverticular perforation
- HP vs PA with loop ileostomy
- Hinchey Stage III or IV
- Randomized trial (n=62), well matched
- 4 deaths (13%) HP
- 3 deaths (9%) PA
- HP - median 3 complications
- PA - median 1 complication
- 90% vs 58% reversal

Randomized clinical trial of antibiotics in acute uncomplicated diverticulitis
A. Chabok, L. Pahlman, F. Hjern, S. Haapaniemi and K. Smedh, for the AVOD Study Group
Br J Surg 2012;99:532-539

Antibiotics for diverticulitis
N = 623 CT proven diverticulitis (uncomplicated)
- 7 days of antibiotics vs. IV fluids only
- 90% febrile
- 1.4% abscess / perforation overall (one operation in no antibiotic group)
- No difference in recurrence or ultimate surgery rates

Surgery rates
N.B. – Only 2% ever have sigmoid resection

A Broad Assessment of Clinical Outcomes After Laparoscopic Antireflux Surgery
Brant K. Oelschlager MD, Kevin C. Ma BS, Renato V. Soares MD, Martin I. Montenovo MD, Juan E. Munoz Oca MD, Carlos A. Pellegrini MD

Laparoscopic antireflux surgery
N = 400 (U. Washington)
- Symptoms: Heartburn (87%), regurgitation (91%), chest pain (78%)
- Durability: 88% at one year, 74% at ten years
- Side effects: Dysphagia (18%), bloating (24%), diarrhea (15%)
- "Success" (pt reported): 70% complete, 22% partial success
- Additional therapy: 41% on meds, 3.7% reop

Randomized clinical trial on the effect of coffee on postoperative ileus following elective colectomy
Br J Surg 2012;99:1530 - 1538
**Effect of coffee on ileus**

Randomized trial, (open vs. lap colectomy)

- N = 80, 3 cups/day vs. warm water
- Time to first bm (60 vs. 74 hrs)
- Time to solid food (49 vs. 56 hrs)
- LOS unchanged

Mean 5 cups to first bm
($2.80 vs. $ 560 for alvimopan)

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**Long-Term Comparison of Endovascular and Open Repair of Abdominal Aortic Aneurysm**


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**EVAR vs. Open repair of AAA**

N = 881 VA pts (9 year follow-up)

- Randomized trial (AAA > 5 cm), mean age 70 yrs
- All cause mortality identical in Oct. 2011
- Periop mortality 0.5% vs. 3.0% (EVAR vs. open)
  (disappears @ 3 yrs)
- 6 late EVAR ruptures vs 0 in open
- EVAR : Better outcomes in younger pts
  Worse outcomes in older pts
  (surprise)

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**Preoperative Laboratory Testing in Patients Undergoing Elective, Low-Risk Ambulatory Surgery**

Jaime Benarroch-Gampel MD, MS; Kristin M. Sheffield PhD; Casey B. Duncan MD, MS; Kimberly M. Brown MD; Yimei Han MS; Courtney M. Townsend Jr MD, and Taylor S. Riall MD, PhD

Ann Surg 2012;256(3)

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**Should More Patients Continue Aspirin Therapy Perioperatively?**

Clinical Impact of Aspirin Withdrawal Syndrome

Neal Stuart Gerstein MD, Peter Mark Schulman MD, Wendy Hawks Gerstein MD, Timothy Randal Petersen PhD and Isaac Tawil MD

Aspirin and Surgery

• 50 million adults take ASA
• Takes 10 days for restoration of platelet supply with normal COX activity
• But 80% of pts normalized by 96 hours
• Rebound $\Rightarrow$ thromboxane, $\downarrow$ fibrinolysis (prothrombotic state)
• Platelet cessation predicts death and major ischemic events

Aspirin and Surgery - Conclusions

• Synergy between hypercoagulable surgical state and aspirin withdrawal syndrome
• Perhaps 4 fold $\uparrow$ in cardiovascular events
• Ocular, intracranial & possibly TURP only exceptions

Surgical Malpractice in the United States, 1990-2006

Ryan K Orosco MD, Jonathan Talamini JD, David C Chang, MPH, MBA, PhD, Mark A Talamini, MD, FACS


Surgical malpractice, 1990 - 2006

• 90% of surgeons $\geq$ 55 yrs old have been sued
• Associated with burnout / depression
• Over 90% of PA surgeons admit to practicing defensive medicine
• $55.6$ billion annual cost in U.S.

Query NPDB (1990 - 2006)

• 62% of claimants female, mean practitioner age is 44 years
• Mean payment $262,727$ (remarkable state variability)
• Illinois, Connecticut and Delaware “jackpot states”
• Outcomes (e.g. quadriplegia) determines settlement amount
• Claims decreasing, amounts increasing