

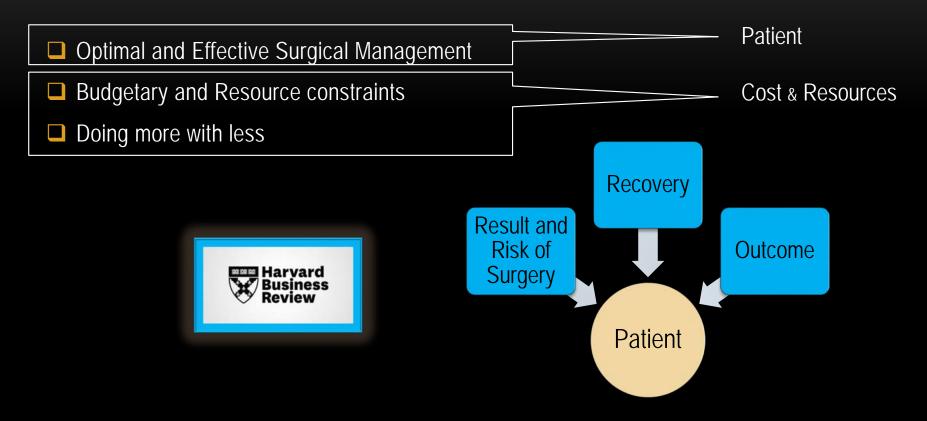
### ZENKER'S DIVERTICULUM

- Optimal and Effective Surgical Patient Management under Budgetary and Resource Constraints Doing More with Less
- Argument for Endoscopic vs Open

Chris Joseph
Morningside H & N MDT
Pretoria Oct 2018



## Endoscopic vs Open



ME Porter, TH Lee. The Strategy That Will Fix Healthcare. <u>Outcomes That Matter To Patients</u>. Harvard Business Review, p9, October 2013.

# Endoscopic better Literature

Optimal & Effective Surgical Management ---

Results/Recovery/Risk (Harvard) 1,2,3,4,5

Less Risk (Cx) for same result

Quicker Recovery (swallow / home)

Budgetary and Resource constraints --

Cost less <sup>6</sup>

- Time (30min) & Hospital stay (1 day)
- Standard ENT resources
- Stapler: cost offsets (consumables)

Doing more with less

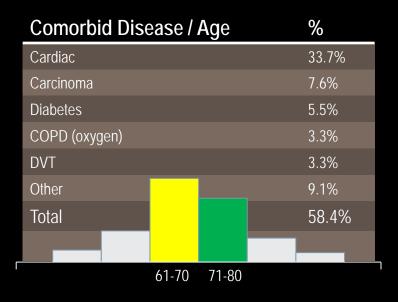
Staff / facilities

- More cases theatre / beds
- One Surgeon (more cases)

#### Literature

- 1. Sen P, Lowe DA, Farnan T. Surgical Interventions for Pharyngeal Pouch. Cochrane Database of Systematic Reviews. 19 April 2011.
- 2. Albers DV, Kondo A, Bernado W M et al. Endoscopic versus surgical approach in the treatment of Zenker's diverticulum: systematic review and meta-analysis. Endoscopy International Open 2016; 04: E678-E686.
- 3. Barton MD, Detwiller KY, Palmer AD, Schindler JS. The Safety and Efficacy of Endoscopic Zenker's Diverticulotomy: A Cohort Study. The Laryngoscope; 126: 2705-2710, 2016.
- 4. Sharp DB, Newman JR, Magnuson JS. Endoscopic Management of Zenker's Diverticulum: Stapler Assisted Versus Harmonic Ace. The Laryngoscope; 119: 1906-1912, 2009.
- 5. Porter ME, Lee TH. Outcomes that matter to patients. Harvard Business Review, p9; October 2013.
- 6. Smith SR, Genden EM, Urken ML. Endoscopic Stapling Technique for the Treatment of Zenker Diverticulum vs Standard Open Neck Technique. A Direct Comparison and Charge Analysis. Arch Otolaryngol Head and Neck Surgery: 128: 141-144, 2002.

#### TRANSORAL LASER MICROSURGERY 95 CASES





- □ Simple & Quick (20 30 mins)
- Minimal Surgical Trauma
  - Comorbid disease
  - > 60s and 70s
- No Assistant
- No sutures, dressings, drains
- Magnification!

# Endoscopic better

Cx 5.2% (5/95 Own Series)

## Risk = Lower than Open 1, 2, 3, 4, 5

Complication	History
Leak (3)	2 Conservative 1 Surgery
Air (1)	Surgical emphysema. G scope.
Teeth (1)	Crown





Result and Risk of

Surgery

Recovery

**HARVARD** 

Outcome

#### Recovery = Quicker, Easier

Matters to Patient	ENDOSCOPIC LASER	OPEN
Fluid Diet Post Op	Immediately	Nil for 3 - 7 Days
Soft / Pureed	Day 2 – 10 (normal diet)	Day 7 - 14
Hospital Stay	1 Day	5 - 7 Days
Barium Swallow	No	Yes (+/-)
NGT	No	Yes (+/-)

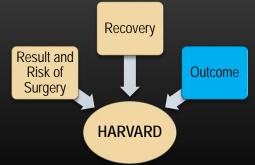
- 1. Sen P, Lowe DA, Farnan T. Surgical Interventions for Pharyngeal Pouch. Cochrane Database of Systematic Reviews. 19 April 2011.
- 2. Albers DV, Kondo A, Bernado W M et al. Endoscopic versus surgical approach in the treatment of Zenker's diverticulum: systematic review and meta-analysis. Endoscopy International Open 2016; 04: E678-E686.
- Barton MD, Detwiller KY, Palmer AD, Schindler JS. The Safety and Efficacy of Endoscopic Zenker's Diverticulotomy: A Cohort Study. The Laryngoscope; 126: 2705-2710, 2016.
- 4. Sharp DB, Newman JR, Magnuson JS. Endoscopic Management of Zenker's Diverticulum: Stapler Assisted Versus Harmonic Ace. The Laryngoscope; 119: 1906-1912, 2009.
- Smith SR, Genden EM, Urken ML. Endoscopic Stapling Technique for the Treatment of Zenker Diverticulum vs Standard Open Neck Technique. A Direct Comparison and Charge Analysis. Arch Otolaryngol Head and Neck Surgery; 128: 141-144, 2002.

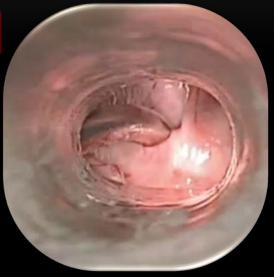
## Endoscopic =

#### **OUTCOME 95% with ENDOSCOPIC**

Same or Better 1, 2, 3, 4, 5

Previous Surgery 19%	Patients 18		
Open	12	66.7%	1 septicaemia po
Endoscopic	6	33.3%	5 staples (1=2x) 1 laser (2x)

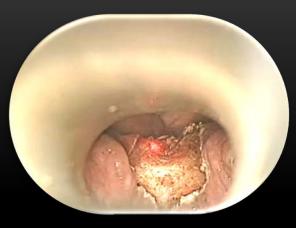




6 weeks PO

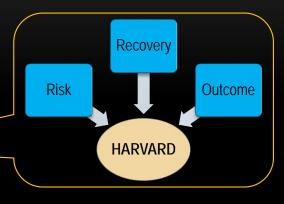
Revision 5.5%

- 1. Sen P, Lowe DA, Farnan T. Surgical Interventions for Pharyngeal Pouch. Cochrane Database of Systematic Reviews. 19 April 2011.
- 2. Albers DV, Kondo A, Bernado W M et al. Endoscopic versus surgical approach in the treatment of Zenker's diverticulum: systematic review and meta-analysis. Endoscopy International Open 2016; 04: E678-E686.
- 3. Barton MD, Detwiller KY, Palmer AD, Schindler JS. The Safety and Efficacy of Endoscopic Zenker's Diverticulotomy: A Cohort Study. The Laryngoscope; 126: 2705-2710, 2016.
- 4. Sharp DB, Newman JR, Magnuson JS. Endoscopic Management of Zenker's Diverticulum: Stapler Assisted Versus Harmonic Ace. The Laryngoscope; 119: 1906-1912, 2009.
- 5. Smith SR, Genden EM, Urken ML. Endoscopic Stapling Technique for the Treatment of Zenker Diverticulum vs Standard Open Neck Technique. A Direct Comparison and Charge Analysis. Arch Otolaryngol Head and Neck Surgery; 128: 141-144, 2002.



#### **CONCLUSION: ENDOSCOPIC IS BETTER**

- Optimal & Effective Surgery
  - ❖ Simple & Quick
  - 1 Day
- Budget and Resource Constraints-
  - \* Reduced Cost
  - Standard Resources
- More with less



- Op Time / Ward stay
- Sutures
- Consumables/Drains
- Dressings
- Offset staples
  - Theatre
  - Beds
  - Surgeons