



SERVIÇO DE CIRURGIA DE CABEÇA E PESCOÇO
UNIVERSIDADE FEDERAL DO CEARÁ
HOSPITAL UNIVERSITÁRIO WALTER CANTÍDIO



RECONSTRUCTION OF THE JEJUNOESOPHAGEAL ANASTOMOSIS WITH A CIRCULAR MECHANICAL STAPLER IN TOTAL LARYNGOPHARYNGECTOMY DEFECTS

Daniel S. Schneider, MD,¹ Neil D. Gross, MD,¹ Brett C. Sheppard, MD,² Mark K. Wax, MD¹

¹Department of Otolaryngology–Head and Neck Surgery, Oregon Health and Science University, Portland, Oregon.
E-mail: schnedan@ohsu.edu

²Department of Surgery, Oregon Health and Science University, Portland, Oregon

HEAD & NECK—DOI 10.1002/hed May 2012

Dr. Bruno Pinto Ribeiro
R4 em Cirurgia de Cabeça e Pescoço
Hospital Universitário Walter Cantídio - UFC



Introdução

- Reconstrução da faringolaringectomia requer a criação de uma passagem tubular para conectar faringe – esôfago
- Retalho microcirúrgico
 - Reabilitação e cicatrização
 - Jejuno e fasciocutâneo tubular
 - Baixa sobrevida

Introdução

- Retalho jejuno
 - Faringolaringectomia, laringectomia radical, estenose laríngea e reconstrução laríngea em 2º tempo
 - Anastomoses manuais em 1 ou 2 planos
 - Grampeadores mecânicos em cirurgia geral →
 - Menor fístula/estenose
 - Menor tempo cirúrgico
 - Grampeador circular x Anastomose manual



Materiais e Métodos

- 33 pacientes de 1999 a 2010 da Oregon Health and Science University
- 4 excluídos – morbidade cardiovascular/neuro
- 17 anastomoses manuais (1999-2007) , 12 grampeador (2007-2010)



Materiais e Métodos

- Ressecção simultânea a retirada do retalho
- Reconstrução com grampeador circular 21 ou 25mm termino-terminal ou sutura 2 planos
- Reconstrução término-lateral (diâmetro)
- Abertura jejuno em V
- Fonoterapia
- Esofagograma – fístula(0-2m)/disfagia(>2m)

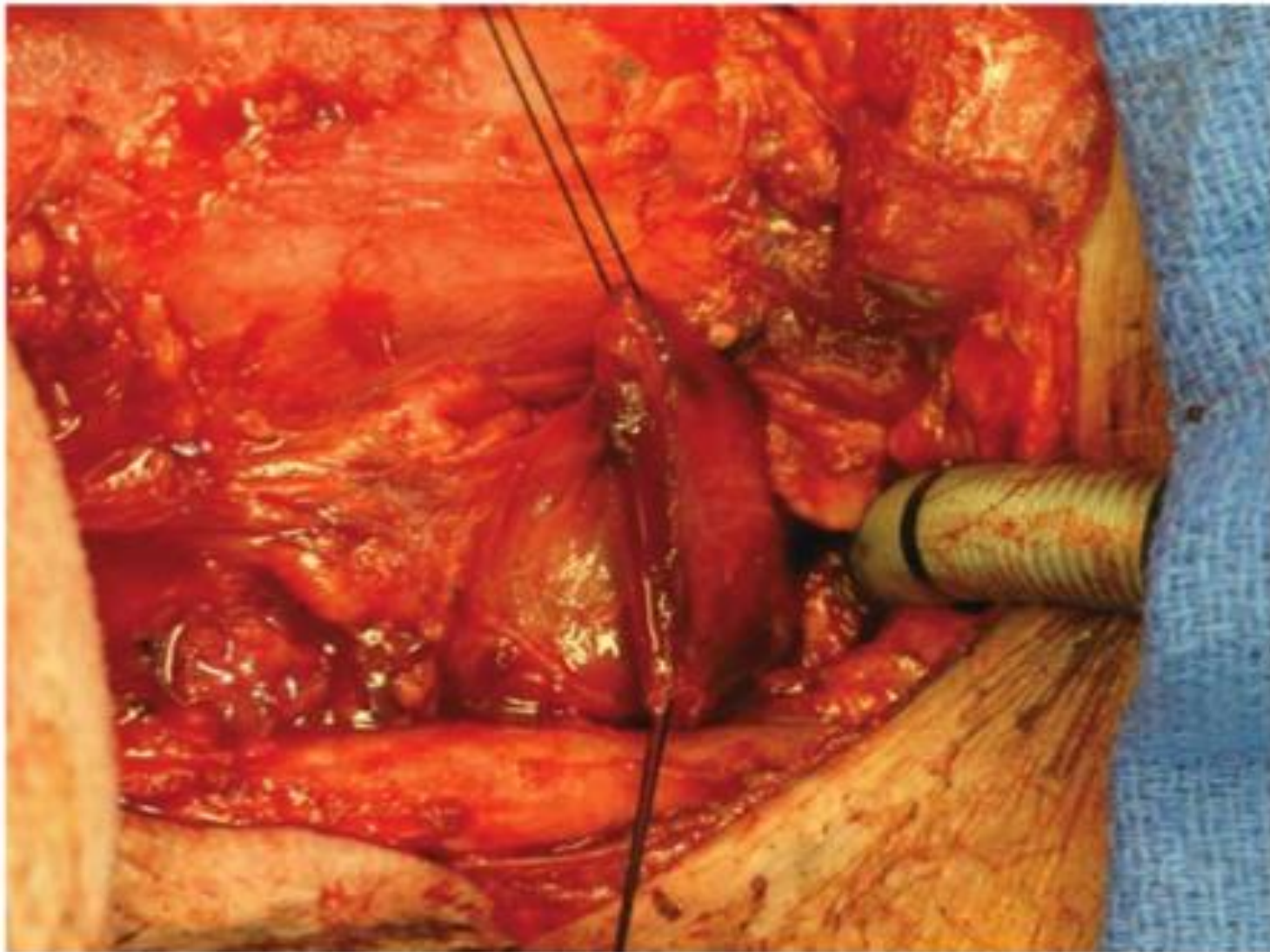


FIGURE 1. Proximal esophagus with retraction sutures for dilating and sizing esophageal lumen. [Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]



FIGURE 2. Jejunal free flap oriented to demonstrate end-to-side nature of anastomosis. Circular 21-mm end-to-end anastomosis (EEA) stapler used in this case for jejunoesophageal anastomosis. Arrow indicates isoperistaltic suture for pharyngo-jejunal anastomosis. [Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]

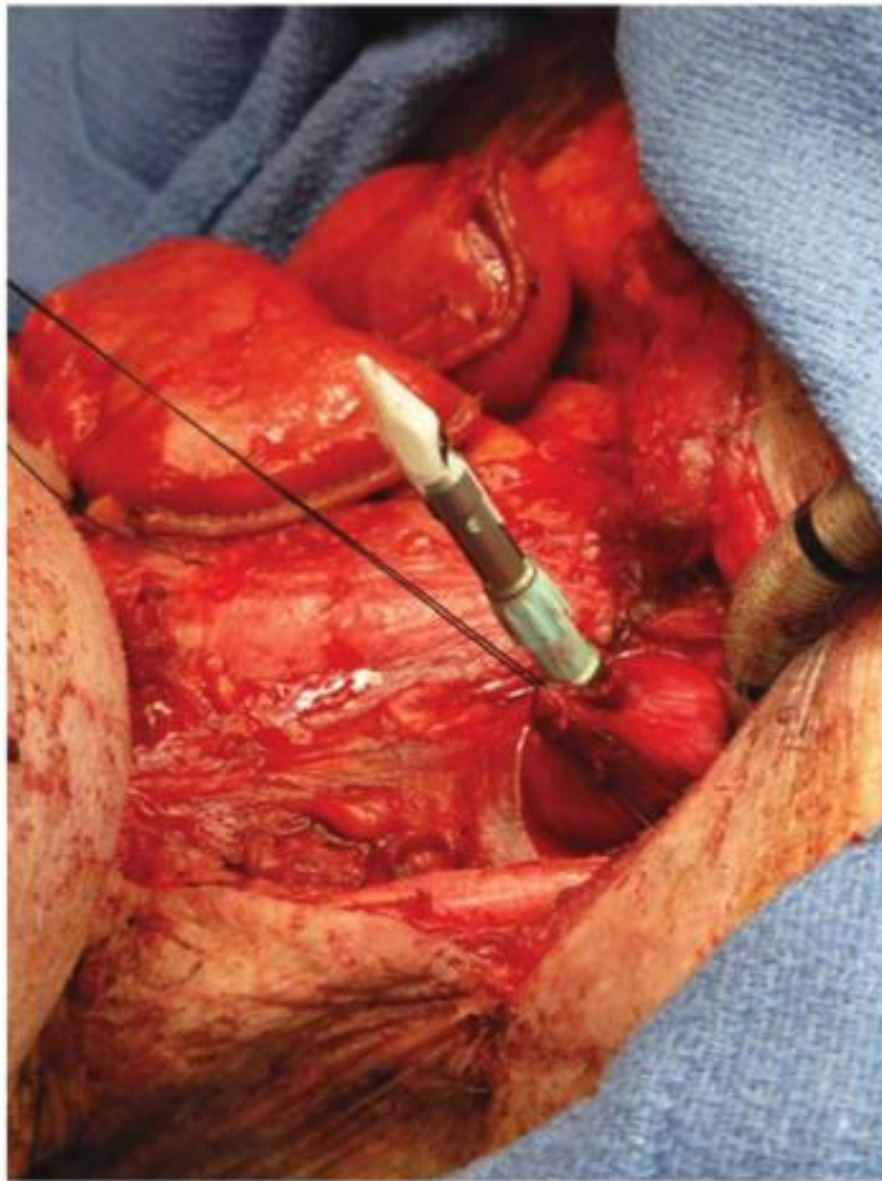


FIGURE 3. A 21-mm anvil with purse-string suture in place. The purse-string suture was removed prior to firing the stapler. [Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]



FIGURE 4. Jejunum advanced over 21-mm circular stapler.
[Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]



FIGURE 5. Anvil pierces jejunum and is seated into secure position within cartridge of stapler. [Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]

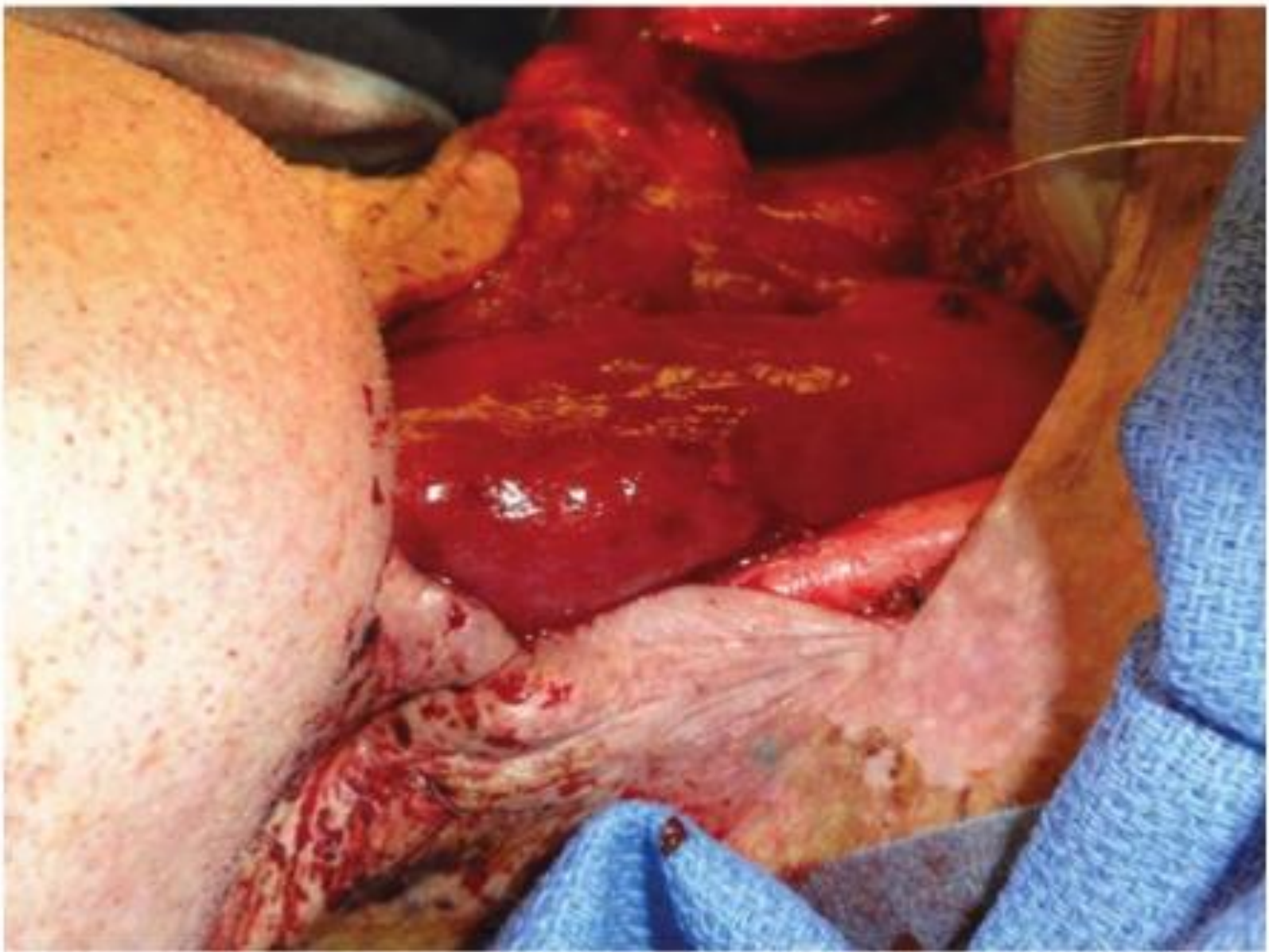


FIGURE 6. Inset jejunum. [Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]

Table 1. Patient characteristics.

Characteristic	Mechanical stapler cohort	Hand-sewn cohort
Patients, <i>n</i>	12	17
Male, <i>n</i> (%)	6 (50%)	11 (65%)
Female, <i>n</i> (%)	6 (50%)	6 (35%)
Indications, <i>n</i>	12	17
Recurrent disease, <i>n</i> or <i>n</i> (%)		
SCC	8 (68%)	14 (82%)
Recurrent	8	10
Recurrent thyroid carcinoma	2 (16%)	2 (12%)
Stricture	2 (16%)	1 (6%)
Hospital stay, d		
Median (range)	13.5 (8–39)	16 (6–71)
Comorbidity		
ASA, mean	3	3

Abbreviations: ASA, American Society of Anesthesiology (1–6 scale, where 3 indicates severe systemic disease); SCC, squamous cell carcinoma.

Table 2. Complications.

Characteristic	Mechanical stapler cohort	Hand-sewn cohort	<i>p</i> value
Fistula, <i>n</i> (%)	1 (8%)	1 (24%)	
Pharyngoesophageal	1	3	.25
Jejunoesophageal	0	1	1.0
Stricture, <i>n</i> (%)	4 (33%)	2 (12%)	
Pharyngoesophageal	1	2	1.0
Jejunoesophageal	3	0	.06
MBSS not clinically indicated	5 (42%)	4 (24%)	NA
MBSS, <i>n</i> (%)	7 (58%)	13 (76%)	
Reason for evaluation			
Fistula evaluation	1 (11%)	10 (59%)	
Dysphagia evaluation			
Stricture	4 (33%)	2 (12%)	
Other etiology	2 (17%)	1 (6%)	

Abbreviations: MBSS, modified barium swallow study; NA, not applicable.

Sobrevida do retalho 96% (28/29)

Table 3. Adjuvant therapy, follow-up.

Characteristic	Mechanical stapler cohort	Hand-sewn cohort	<i>p</i> value
Adjuvant radiation, <i>n</i> or <i>n</i> (%)	12	17	1.0
No	8 (67%)	9 (60%)	
Yes	4 (33%)	6 (40%)	
Adjuvant chemotherapy, <i>n</i> or <i>n</i> (%)	12	17	.55
No	10 (83%)	16 (94%)	
Yes	2 (17%)	1 (6%)	
Follow-up, mo			
Median (range)	10 (1.5–39)	20 (3–124)	NA

Abbreviation: NA, not applicable.



Discussão

- Reconstrução – técnica desafiadora
- Complicações clínicas e cirúrgicas
- Grampeador – taxas similares de complicação
 - Diâmetro diferente jejuno x esôfago



Discussão

- Fístula 13-33% (8 x 24%)
 - 2/5 pacientes cirurgia + RT prévia
- Estenose 7-18% (33 x 12%)
 - Erro técnica, RT PO, TQT prévia, ?
 - Recidiva local
- Yasumura – sem associação QT, RT, retalho jejuno x Estenose

Discussão

- Retalho jejuno não garante deglutição funcional – fases oral e orofaríngea da deglutição ruim
 - Ressecções extensas, doença recidivada
- Limitações –
 - Retrospectivo – pouco frequente; avaliação deglutição
 - n pequeno
 - doença variada – difícil comparação

Conclusão

- Grampeador circular – seguro e efetivo com retalho jejunal
 - Fistula(↓) e estenose (↑) comparáveis
 - Fechamento em 3 planos
 - Menor tempo cirúrgico
- Disfagia multifatorial – necessita maiores estudos
 - Longo período gastrostomia