Long term quality of life in patients after McKeown vs Ivor Lewis esophagectomy

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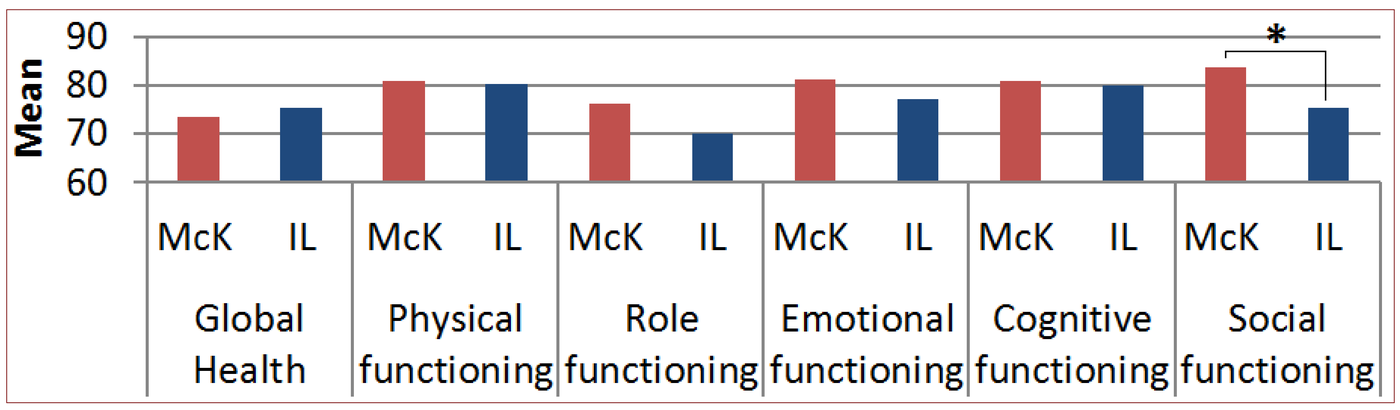
Background: Treatment of esophagus and gastroesophageal junction (GEJ) cancers is challenging. The therapy for these cancers mainly consists of (neo)adjuvant chemo(radio)therapy and surgery. Different surgical approaches exist and there is no evidence which is the preferred approach in terms of oncology and postoperative morbidity.

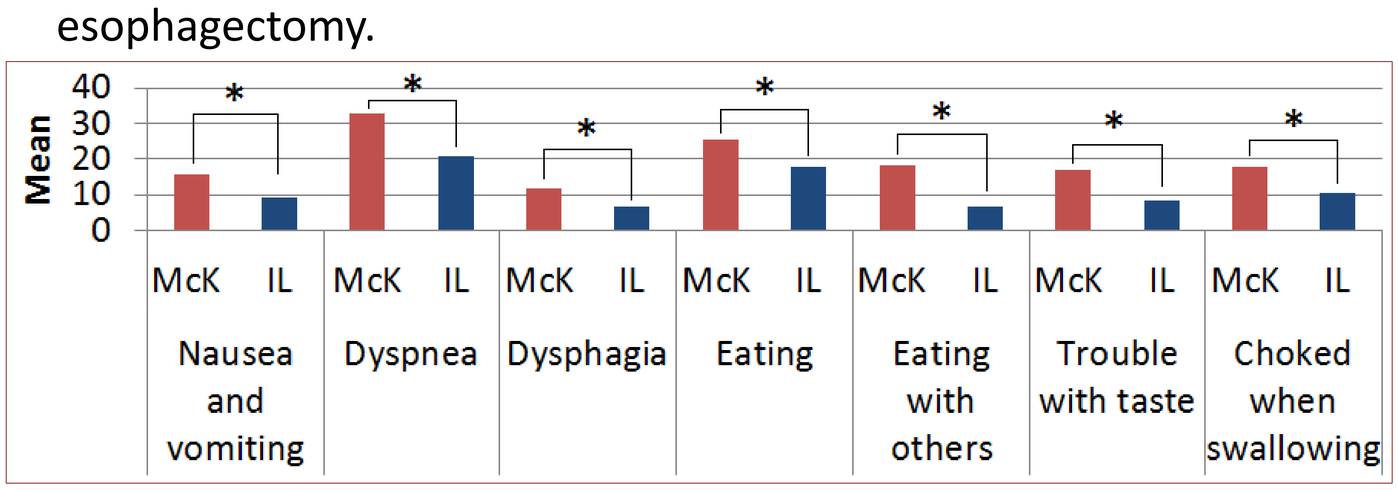
Objective: To investigate the difference in the long-term quality of life in patients with distal esophagus and GEJ cancers undergoing McKeown (McK) versus Ivor Lewis (IL) esophagectomy in a tertiary referral center.

Methods: Quality of life questionnaires (EORTC QLQ-C30, OG25 &INFO25) were handed out during the outpatient clinic appointments during the period of January 2014 - December 2017 to patients with distal esophagus and GEJ cancers >1 year after McKeown or Ivor Lewis esophagectomy. Patients with proximal esophageal cancer and metastases or relapse during follow up time were excluded from this study.

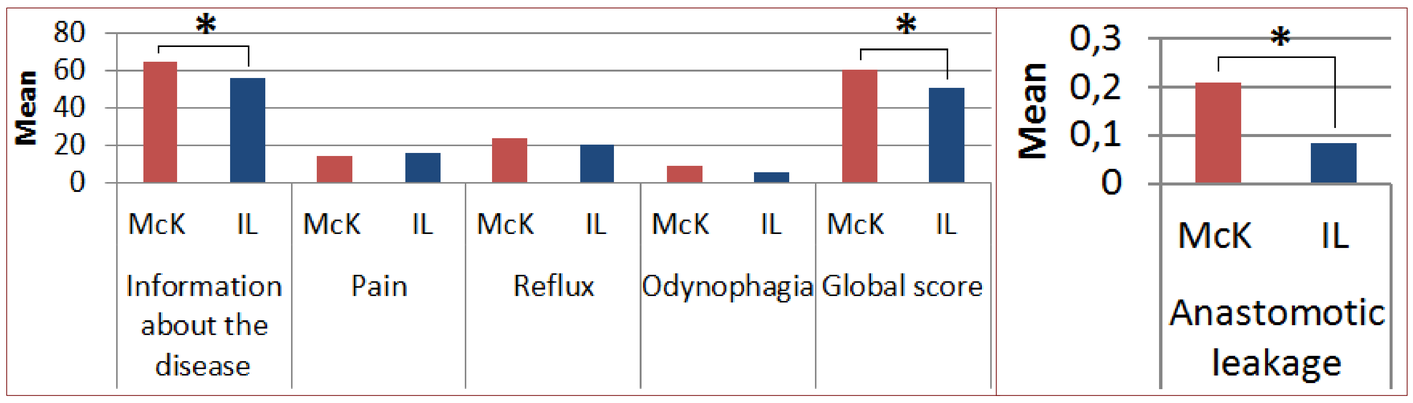
Results:



- No significant difference in Global Health, physical, role, emotional and cognitive functioning.
- Significantly better social functioning after McKeown esophagectomy.



- Significantly less nausea & vomiting, dyspnea, dysphagia, trouble with eating, trouble with taste, choking when swallowing after Ivor Lewis esophagectomy.



- Significantly better Global score and more received information about the disease after McKeown esophagectomy.
- Significantly more anastomotic leakage after McKeown esophagectomy.
- No significant difference in pain, reflux or odynophagia.

			McKeown N (%)	Ivor Lewis N (%)	P
N			67	107	
Age (yrs)	Mean		63	61	0,194
	Range		28-82	43-81	
Gender	Male		46 (74,2)	83 (77,6)	0,621
	Female		16 (25,8)	24 (22,4)	
Tumor location	Distal esophagus		54 (87,1)	37 (34,6)	0,000
	GEJ		8 (12,9)	70 (65,4)	
Follow-up time (yrs)	Mean		2,5		
	Range		1-6		
Open vs scopic	Open		10 (16,1)	6 (5,6)	0,031
	Scopic		52 (83,8)	101 (94,4)	
ASA classification	1		8 (12,9)	28 (26,2)	0,671
	2		49 (79)	53 (49,5)	
	3		5 (8,1)	26 (24,3)	
Neo-adjuvant therapy	No		5 (8,1)	13 (12,2)	0,388
	Yes	Chemo	0	4 (3,7)	
		Chemoradio	57 (91,9)	90 (84,1)	
Adjuvant therapy	No		60 (96,8)	82 (76,6)	0,000
	Yes	Chemo	2 (3,2)	24 (22,4)	
		Chemoradio	0	1 (0,9)	
Post-op complications	Yes		29 (46,8)	44 (41,1)	0,478
	No		33 (53,2)	63 (58,9)	
Anastomotic leakage	Yes		13 (21)	9 (8,4)	0,035
	No		49 (79)	98 (91,6)	
Histologic type	Adenocarcinoma		43 (69,4)	99 (92,5)	0,001
	Other		19 (30,6)	8 (7,5)	
(y)pT	T0		0	9 (8,4%)	0,106
	T1		14 (22,6)	27 (25,2)	
	T2		16 (25,8)	21 (19,6)	
	T3		30 (48,4)	48 (44,9)	
	T4		2 (3,2)	2 (1,9)	
(y)pN	N0		22 (35,5)	57 (53,3)	0,516
	N1		29 (46,8)	30 (28)	
	N2		11 (17,7)	11 (10,3)	
	N3		0	9 (8,4)	
cM	M0		61 (98,4)	105 (98,1)	0,904
	M1		1 (1,6)	2 (1,9)	
Radicality	R0		62 (100)	107 (100)	0,448
	R1		0	0	

Conclusion: These long term quality of life results in patients where both McKeown and Ivor Lewis esophagectomy are feasible should be considered alongside the oncologic outcomes and postoperative morbidity.

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