



Associazione
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Radioterapia ad intento radicale vs Chirurgia seguita da Radioterapia adiuvante nel trattamento delle neoplasie localmente avanzate di laringe e ipofaringe.



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Background

- Larynx cancer is one of the most common malignancies of the upper aero-digestive tract (96% of all laryngeal tumors) while SCC of the hypopharynx represents only 3-5% of all head and neck cancers.

Shah JP, Arch Otolaryngol Head Neck Surg 1997
Hall SF, The Laryngoscope. 2008

- 5 Years survival rates for stage III-IV larynx cancer: 60 %
hypopharynx cancer: 15-45%

Licitra L, Crit Rev Oncol Hematol 2003
Takes RP, Head & neck. 2012

- Laryngo-pharyngectomy ± adjuvant radiotherapy has been for a long time the treatment of choice for locally advanced disease, determining a significant impact on QoL of patients.
- The addition of chemotherapy to RT allowed the larynx preservation without compromising survival rates.

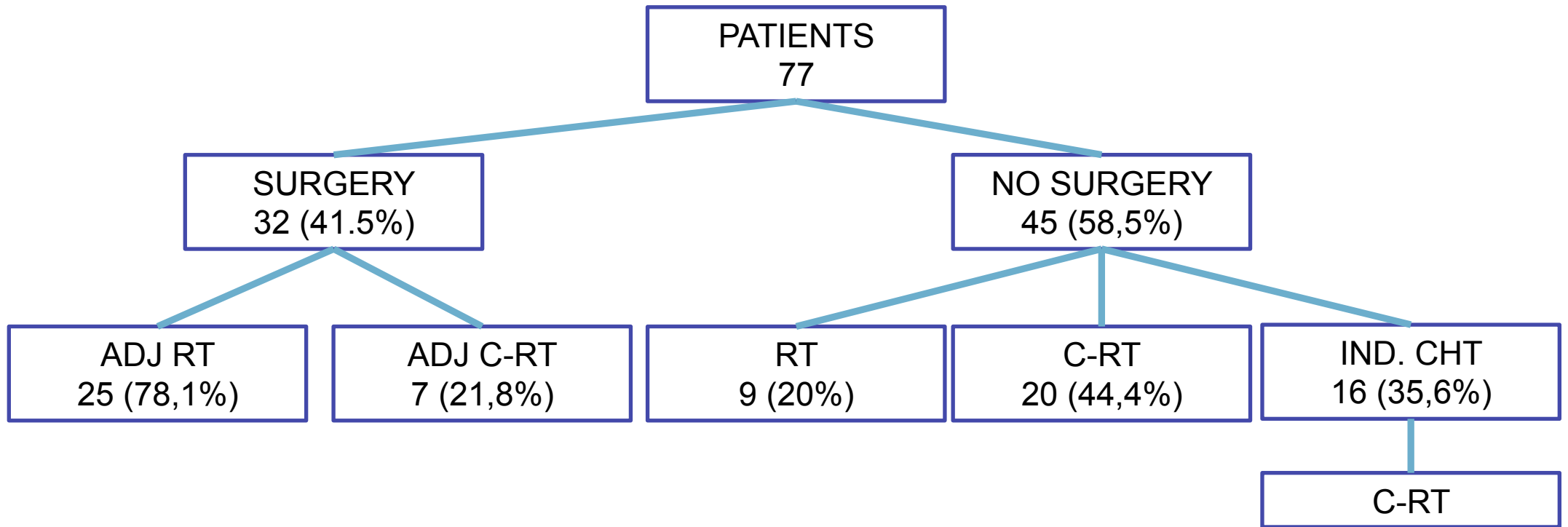
Lefebvre JL, Journal of the National Cancer Institute. 1996

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Materials and methods

	Number	%
Patients	77	
Mean Age, y	64 (35 – 83 years)	
Sex		
Male	66	86%
Female	11	14%
ECOG PS		
0	47	61%
1	26	33,7%
2	4	5,3%
Primary tumour site		
Hypopharynx	28	36,4%
Larynx	49	63,6%
Stage		
III	22	28,5%
IVa	47	61%
IVb	8	10,5%

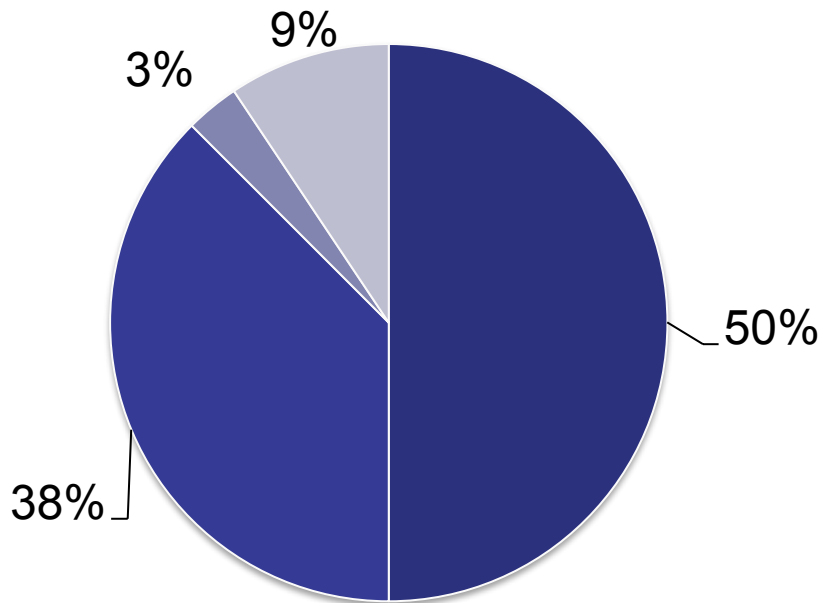
Materials and methods



Materials and methods

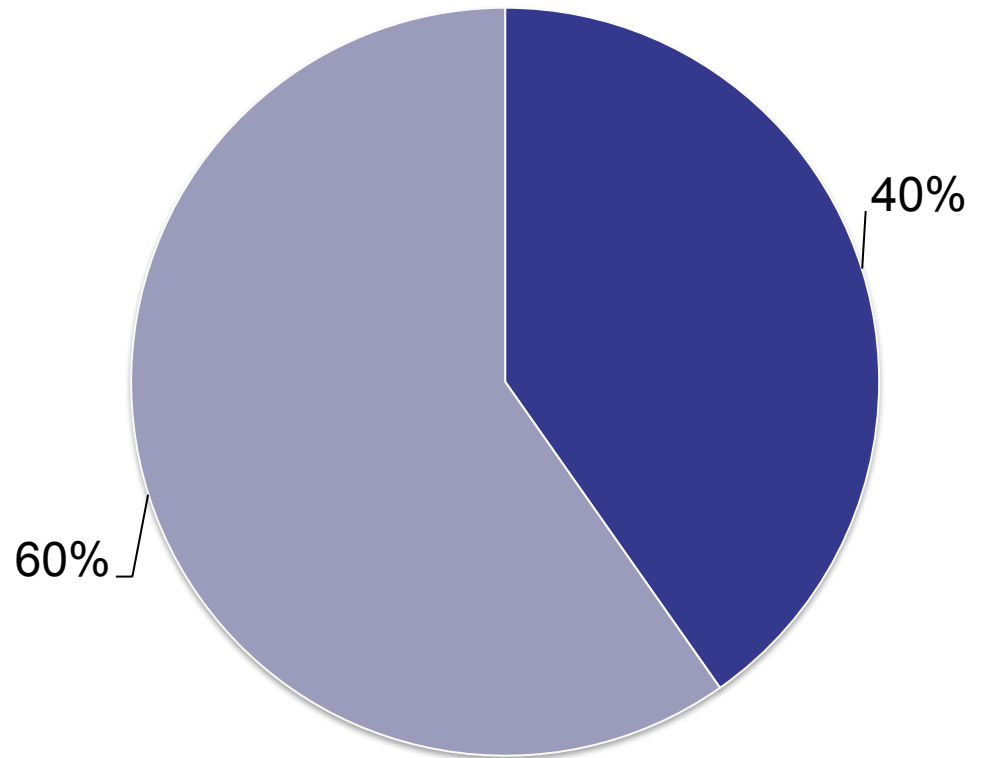
Surgery

- Total laryngectomy
- Subtotal laryngectomy
- Partial pharyngectomy
- Total laryngectomy + partial pharyngectomy



RT Technique

- 3D-CRT
- VMAT



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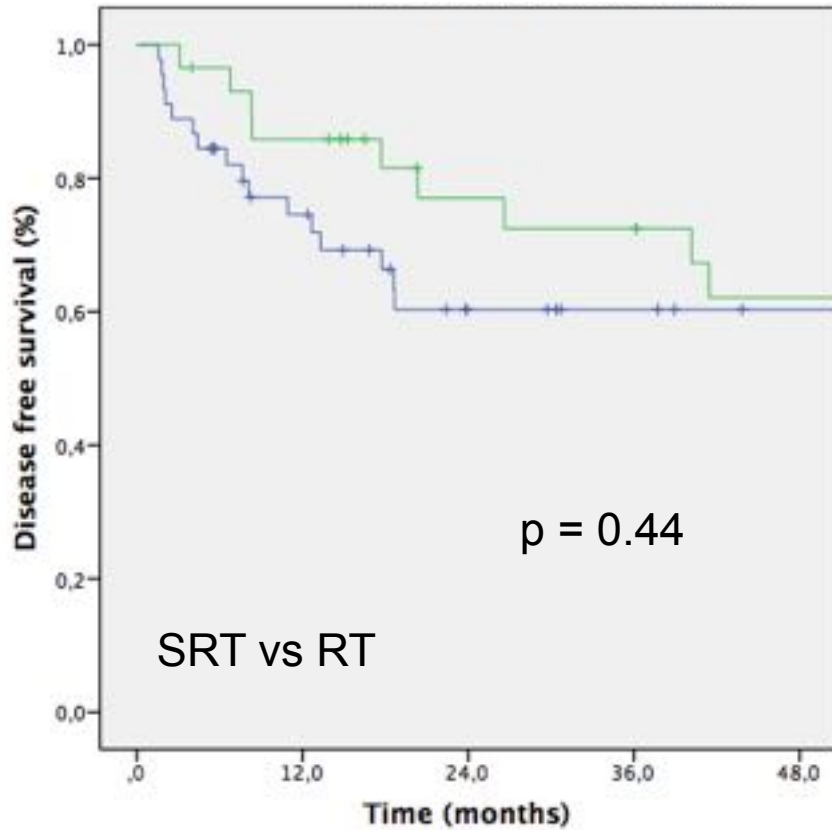
Results

- Median follow-up: 43,1 months (range 3 – 136 months)
- 11 (14,2%) loco-regional relapse
- 19 (24,6%) distant metastases

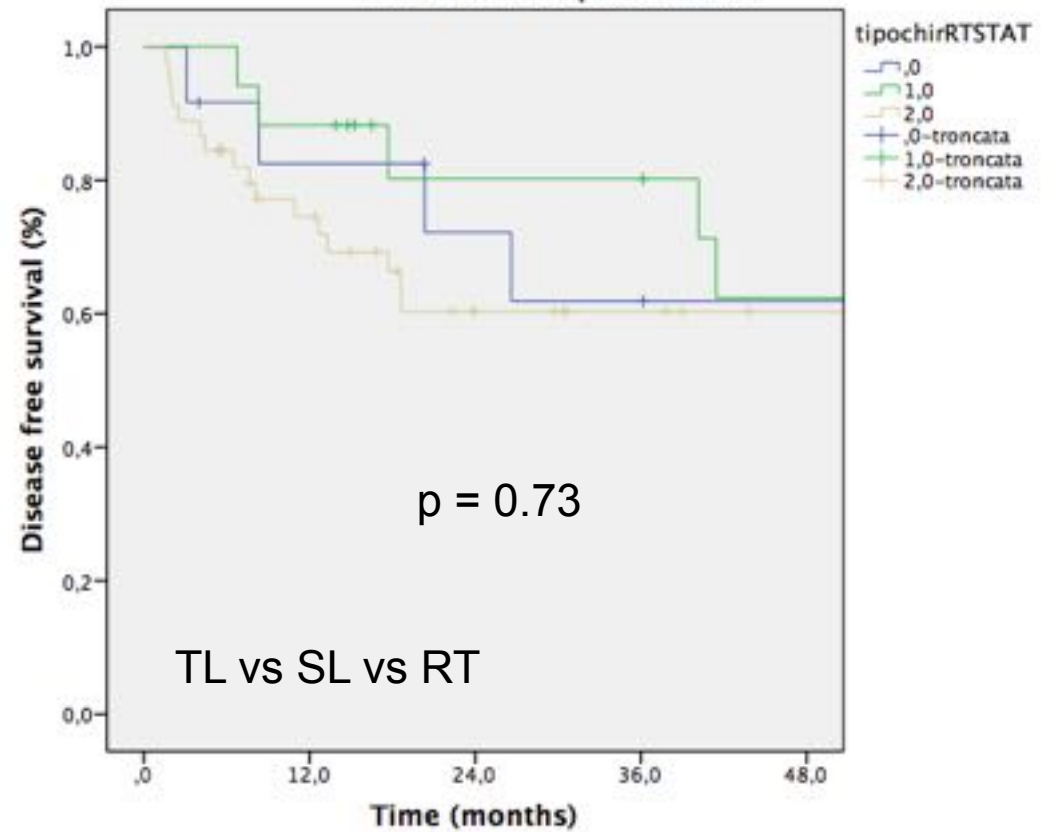
- DFS at 1 and 3 y:
 - SRT: 78% and 64%
 - RT: 60% and 60%

- OS at 1 and 3 y:
 - SRT: 88% and 73%
 - RT: 71% and 66%

Results

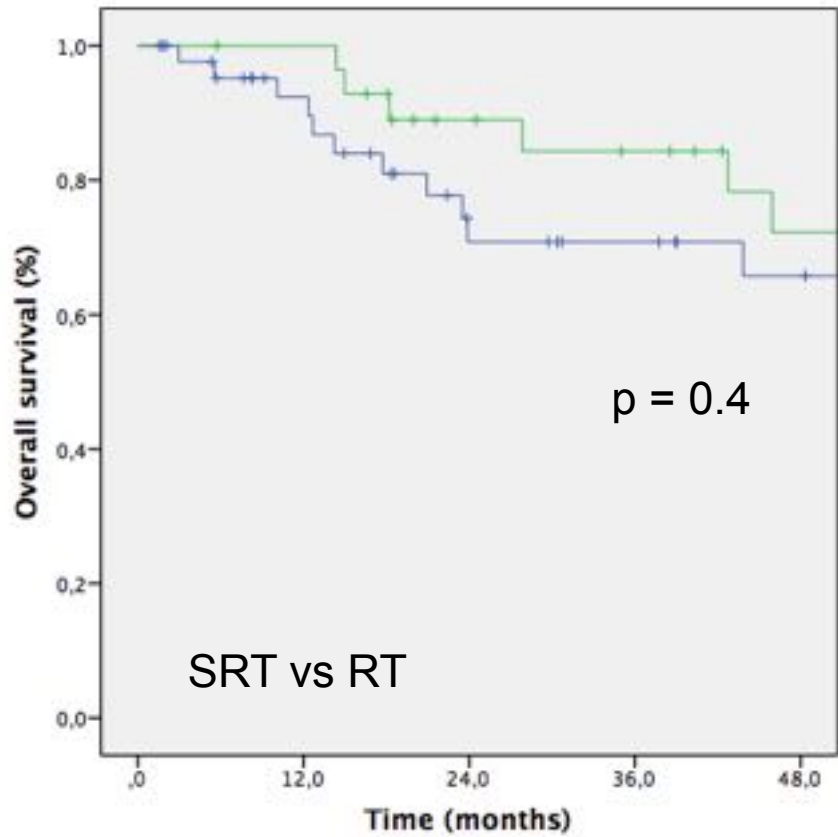


DISEASE FREE SURVIVAL

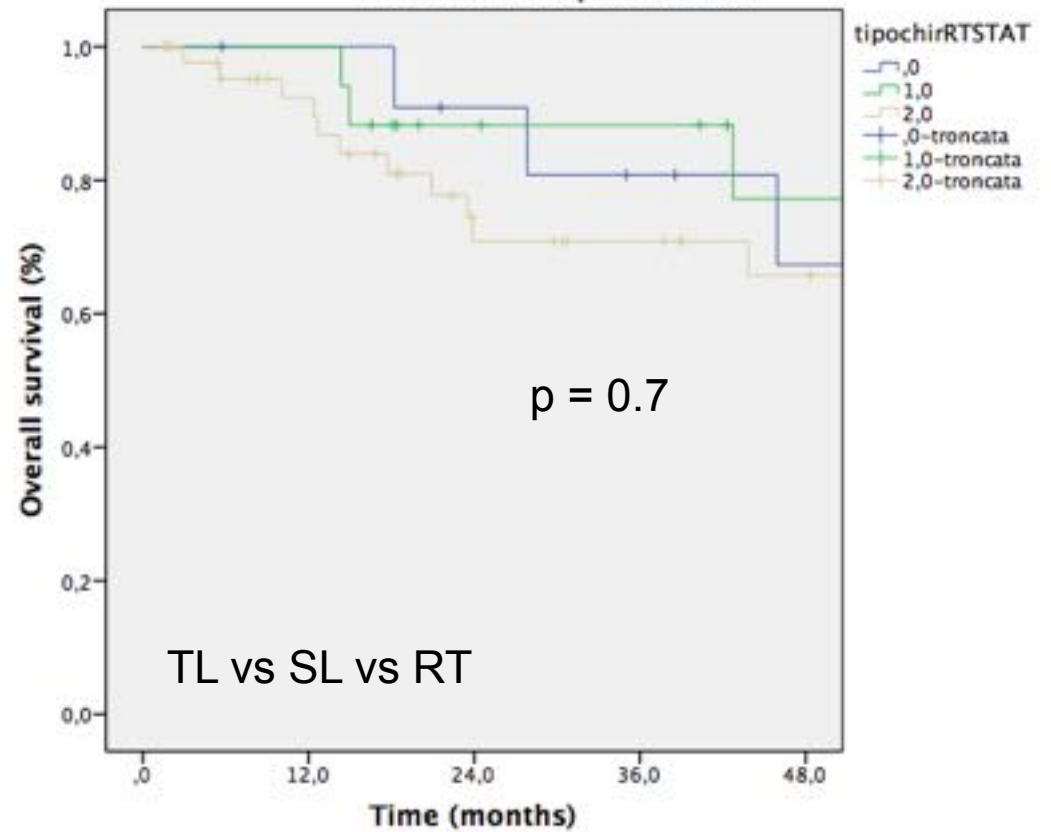


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Results



OVERALL SURVIVAL



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Results

Laryngeal function after treatment

	CTCAE Grade	SRT (n= 32)	RT (n = 45)
Voice alteration	2	3	6
	3	0	1
	4	19 (19)	0
Dysphagia	2	9 (5)	14
	3	3 (1)	6
	4	0	0

Complications requiring surgical intervention

	SRT (n= 32)	RT (n = 45)
Esophageal/ pharyngeal stenosis	2 (6,2%)	1 (2,2%)
Cartilage necrosis	2 (6,2%)	0

Conclusions

- Primary organ preservation treatment approach using C-RT is feasible and tolerable for selected patients with Stage III-IV SCC of the pharynx or larynx.
- Definitive C-RT may be preferred in locally advanced resectable laryngeal and hypopharyngeal cancer, providing treatment outcome comparable to surgery plus RT or C-RT.
- Further prospective investigations using modern concurrent CRT and modern surgical techniques remain necessary.