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27-30 Nisan 2017 Gloria Kongre Merkezi ANTALYA

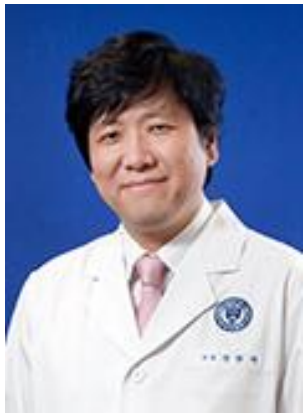
Panel

Kanser mi agresif, klinisyen mi?
Dünyada 'farklı/ortak' bakış açıları

Who is aggressive: The physician or the cancer?
'Different/common' perspectives from the world

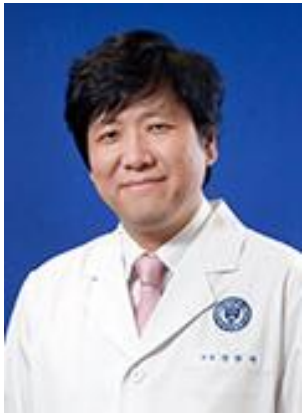
Dimitrios Linos, Quan-Yang Duh, Hang-Seok Chang

- Increasing incidence…



- What lessons learned from screening?





- Scenario #1
  - 45 yo lady
  - US = 3 nodules
    - max 9mm in size, 1 has suspicious features
  - **Biopsy the suspicious subcm nodule?**

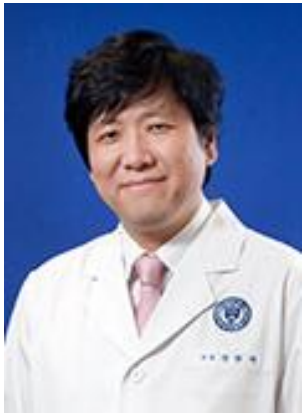
- Which nodules should be further characterized based on genetic analysis?

- Surgery for incidentally diagnosed papillary microcarcinoma?

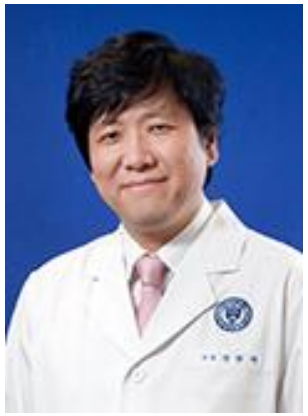
- Is ‘incidental cancer’ different than ‘clinical cancer’?

- Scenario #2
  - 25 yo lady
    - hemithyroidectomized, 5mm PMC
  - **When is completion thyroidectomy indicated after lobectomy, in case of incidental detected PMC?**





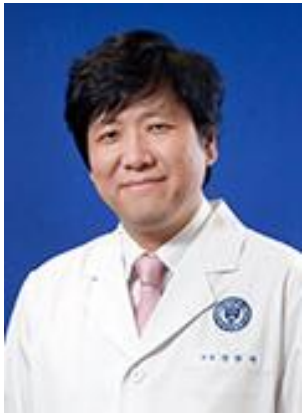
- Would knowledge of BRAF status affect the management?



- Who is the high-risk case?

- Scenario #3
  - Postoperative diagnosis of multifocal subcentimeter cancer after lobectomy…
  - **Completion thyroidectomy?**





- Is immediate surgery warranted for all PMC detected incidentally?
- Do you approve active surveillance? If yes; which patients?
- Is there a size threshold?

- If active surveillance… any TSH supression?

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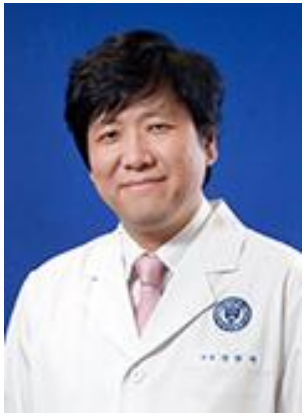
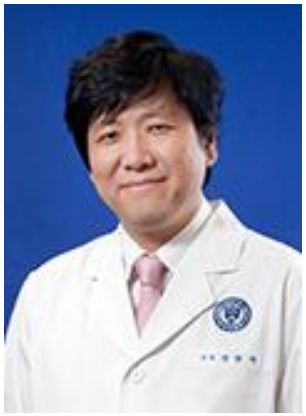


- If active surveillance; how to follow?
- What should be the indications for surgery during follow-up?



Cost effectiveness

Study design

- Pts: Thyroid cancer treated at 2010 in YUMC
  - Group 1: thyroid lobectomy and CCND
  - Group 2: total thyroidectomy and CCND
  - Group 3: total + ipsilateral MRND
  - Group 4: total + bilateral MRND
    + Mediastinal diisection
- Follow-up 5 years

Patient Characteristics

	Hemi (n=10)	Total (n=10)	Total & ipsilateral RND (n=10)	Total & bilateral RND & mediastinal dissection (n=3)	P-value
Sex, females (% of total)	8 (80%)	8 (80%)	8 (80%)	1 (33.3%)	ns
Age,	48±7.0	46±7.8	46±9.7	58±26	ns
TNM					<0.001
Stage I	10 (100%)	4 (40%)	5 (50%)	0	
Stage II			0	0	
Stage III		5 (50%)	0	0	
Stage IV		1 (10%)	5 (50%)	3 (100%)	

The costs of major clinical examinations and surgery

Item	Cost (Korean Won)	Cost (US dollar) 1 $ ≒ 1135 ₩
Thyroid U/S	32,160	28.33
Neck CT	114,310	100.56
PET-CT	334,830	295.00
Thyroid function test	54,240	47.79
131- Iodine therapy	41,810	36.84
I-131 scan	92,180	81.22
Thyroid lobectomy c CCND	705,960	621.99
Total thyroidectomy c CCND	1,026,220	904.16
Total and ipsilateral RND	1,271,810	1,120.54
Total, bilateral RND and mediastinal dissection	1,909,410	1,682.30

Analysis of healthcare costs by extent of surgical treatment

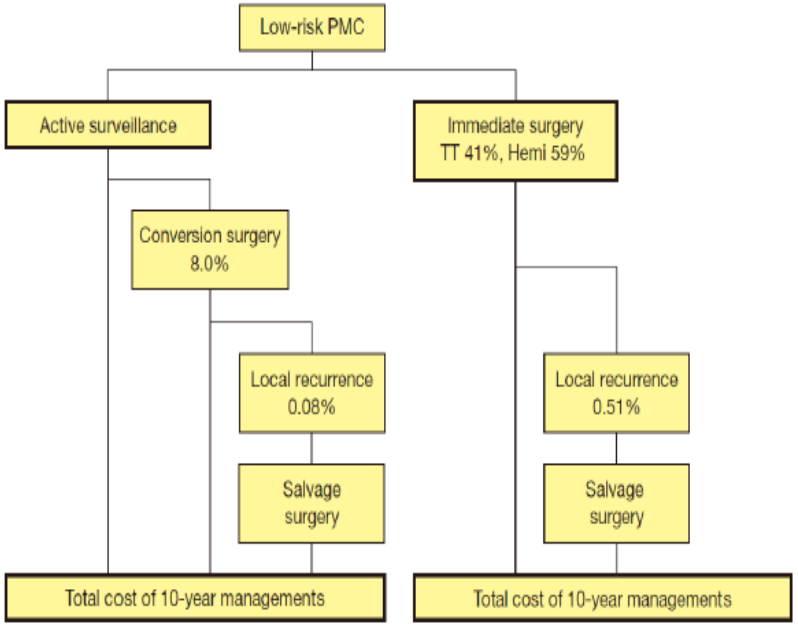
	Lobectomy (n=10)	Total (n=10)	Total & ipsilateral RND (n=10)	Total & bilat RND & mediastinal dissection (n=3)	P-value
Operation	**₩ 2847** ±706	**₩ 3366** ±468	**₩ 5746** ±1045	**₩ 17382** ±14902	**<0.001**
OPD	**₩ 2919** ±884	**₩ 4711**±621	**₩ 5918** ±1742	**₩ 13208** ±6048	**<0.001**
RAI Tx and other Tx		**₩ 1675** ±1054	**₩ 2668** ±1342	**₩ 18066** ±17246	**<0.001**
Total	**₩ 5766 ±713**	**₩ 9753 ±1395**	**₩ 14333 ±3310**	**₩ 48657 ±16957**	**<0.001**
Ratio	**1 : 1**	**1.7 : 1**	**2.5 : 1**	**8.4 : 1**	

Costs are shown in 1000 ₩ units.

Cost for treatment and follow up of thyroid cancer increases according to the severity of disease

Comparison of the costs of active surveillance and immediate surgery in the management of low-risk PTMC

Endocr J 2016 Oda H et al.



At Kuma Hospital in Japan, the 10-year total cost of immediate surgery was 4.1 times expensive than active surveillance. (include cost a/w op conversion & recurrences)

Table 3 Costs of simple active surveillance and simple immediate surgery with 10 years of follow-up care

	Medicine	Cost for 10 years (Japanese yen)	Cost for 10 years (US$)
Active surveillance	no	167,780	1,525
Hemithyroidectomy	no	794,770	7,225
	l-thyroxine	947,720	8,616
Total thyroidectomy	l-thyroxine	1,014,070	9,219
	l-thyroxine & vitamin D	1,086,070	9,873

The costs include the costs of the initial diagnosis step, all costs for surgery cases, follow-up care for 10 years, and prescription medicine when necessary. The costs of medicines were calculated at l-thyroxine 100 μg/day and alfacalcidol 2 μg/day for vitamin D.

Thyroidectomy vs Active Surveillance for Subcentimeter PTCs - The Cost Conundrum.

JAMA Otolaryngology–H&N Surgery 2016 Kandil E, Noureldine SI, Tufano RP

Table. Primary Factors to Consider When Evaluating Cost and Value of Treatment Options for Papillary Thyroid Microcarcinomas

	Surgery		Active Surveillance	
Factors to Consider	Lobectomy	Total Thyroidectomy	Ideal Cases	Patients Who Proceed to Surgery[a]
No. of patients needing hormone therapy	25%-50%	All patients	None	All patients
Follow-up frequency and type	Yearly, ultrasound and serum thyroglobulin measurements	Yearly, ultrasound and serum thyroglobulin measurements	Every 6-12 mo	Preoperatively, every 6-12 mo during surveillance and yearly follow-up postoperatively
Initial cost estimates[b]	$7615 Plus postoperative follow-up	$8565 Plus postoperative follow-up	Cost of follow-up surveillance only[c]	Follow-up surveillance, surgery ($8565-$13 940), radioactive iodine ablation, and postoperative follow-up
Complications[d]				
Temporary	1%	5%-30%	0% Stable or silent cancer growth	Higher complication rate due to more extensive surgery (progression to clinical disease in 2%-9% of patients)
Permanent	Minimal risk	2%-5%	0% Stable or silent cancer growth	Higher complication rate due to more extensive surgery (progression to clinical disease in 2%-9% of patients)
Mortality	1/1000 Patients	1/1000 Patients	0-1/1000 Patients	0-1/1000 Patients

[a] Data obtained from Japanese studies on active surveillance for PTMC. Applies to 7% to 16% of patients.[5,6]

[b] Values estimated from the Nationwide Inpatient Sample-Healthcare Cost and Utilization Project. The cost is adjusted for the inflation rate to reflect the 2014 dollar value.[8]

[c] Currently, there are no data to show the cost of follow-up surveillance only.

[d] Complications also contribute to cost estimates and range from $101 to $22 050 (depending on the type of complication).

Cost-effectiveness of Active Surveillance VS Hemithyroidectomy For PTMC

2017 Surgery. Venkatesh S et al. UCSF

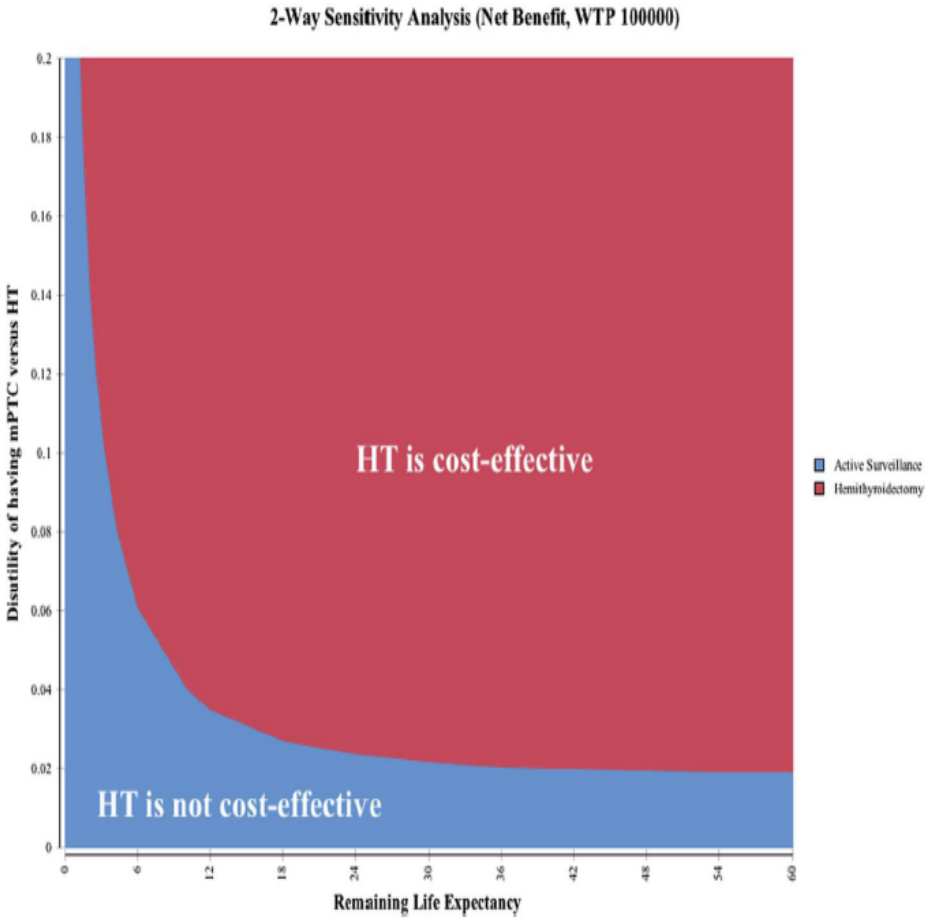
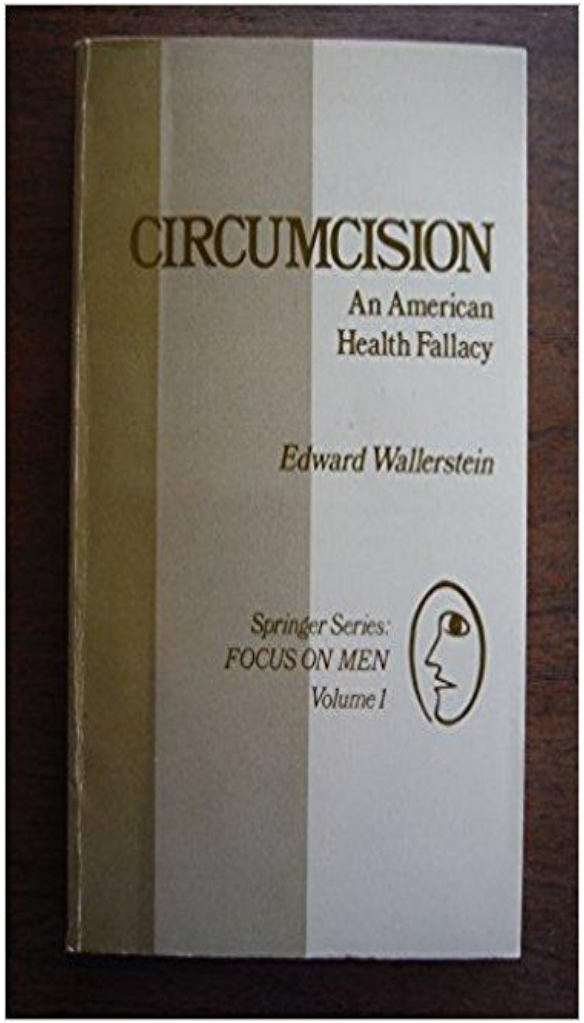


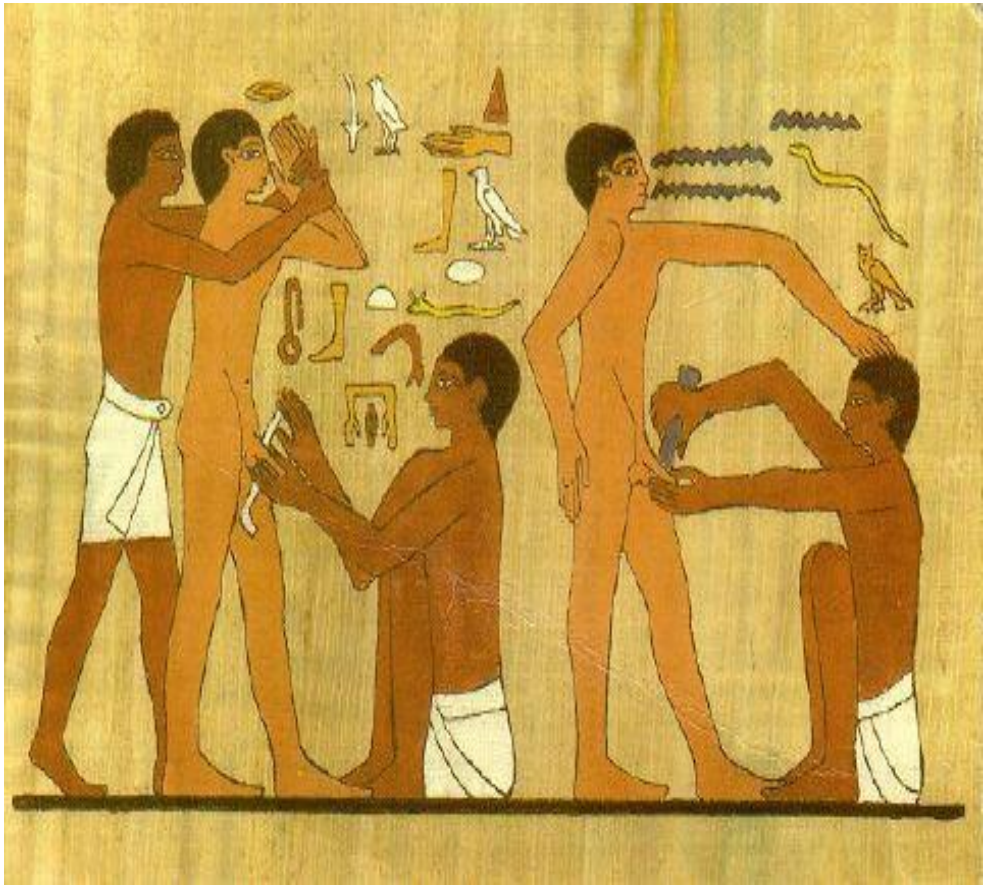
Fig 1. Two-way sensitivity analysis of the disutility difference of AS compared to disease-free status after uncomplicated HT versus years lived after initial mPTC diagnosis (willingness-to-pay threshold $100,000/QALY gained).

Conclusion: The cost-effectiveness of hemithyroidectomy is highly dependent on patient disutility associated with active surveillance. In patients who would associate nonoperative management with at least a modest decrement in quality of life, hemithyroidectomy is cost-effective.

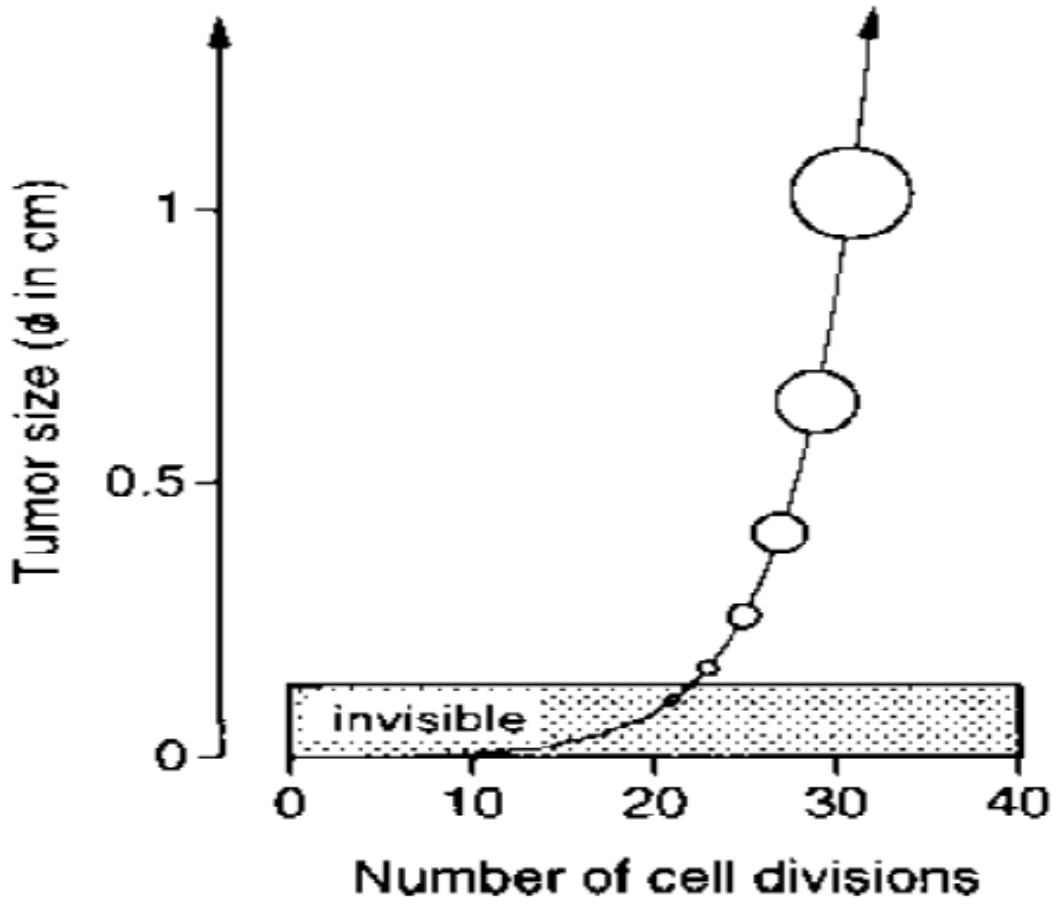
Circumcision, and American health fallacy – by Edward Wallerstein



This is NOT a circumcision!

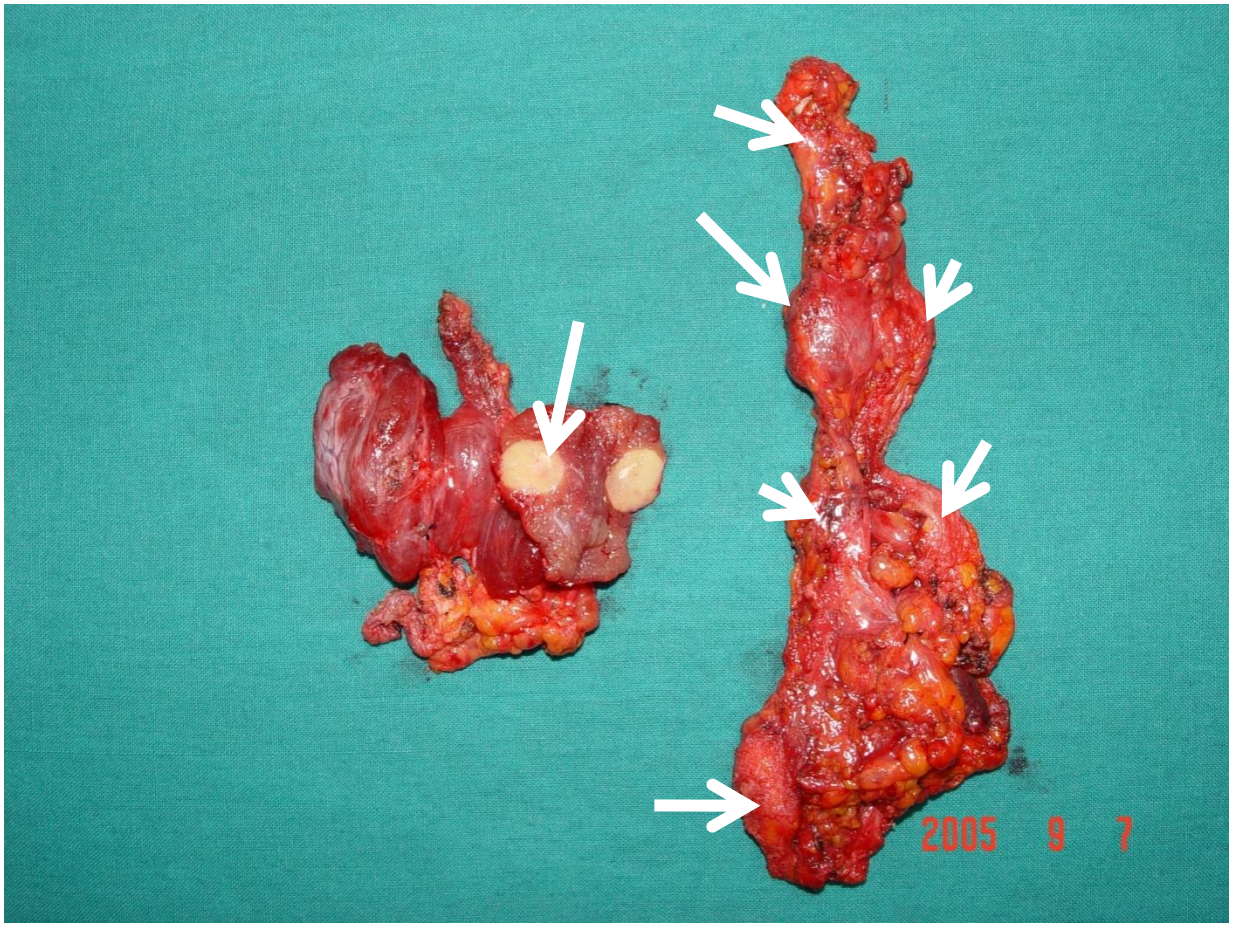


Growth pattern of CANCER



Journal of Surgical Oncology 1997;65:284–297

PTMC with Extensive lateral LN mets



Pathology: PTCa, 0.9cm, intrathyroidal,
central LN mets(1/5), lateral LN(17/51)

6 blinds palpated an elephant – in Buddhists texture

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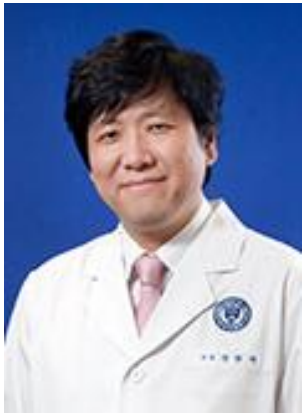
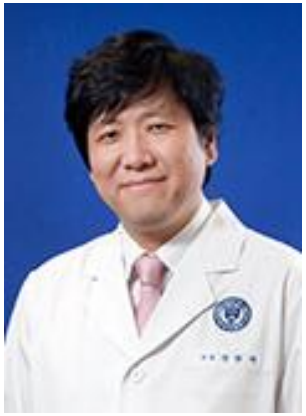


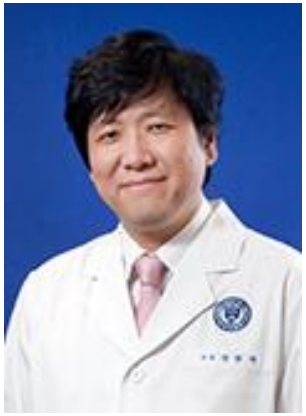
- If total thyroidectomy… Any RAI ablation?





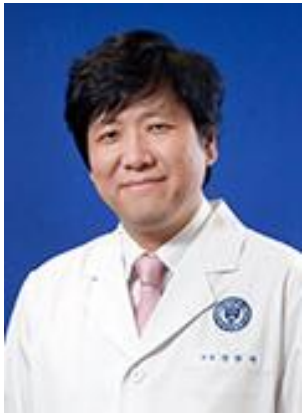
- Scenario #4
  - 57 yo men, 3cm papillary carcinoma
  - **What type of surgery?**





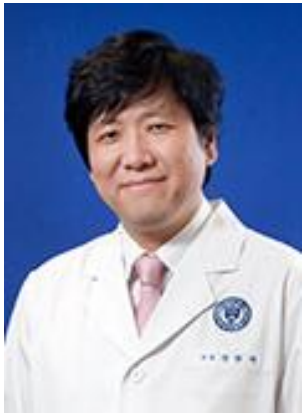
- Scenario #4
  - 57 yo men, 3cm papillary carcinoma
  - **Preoperative laryngeal examination?**





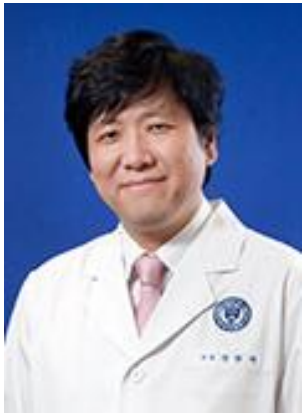
- Scenario #4
  - 57 yo men, 3cm papillary carcinoma
  - **Is there any requirement for central lymph node dissection?**





- Scenario #5
  - 47 yo lady
    - Total thyroidectomized due to papillary carcinoma. During follow-up developed ipsilateral lymph node metastasis.
  - **Is there any requirement for central lymph node dissection during lateral lymph node dissection?**





- Scenario #6
  - 62 yo lady
    - Thyroidectomized, papillary carcinoma, 2.5cm in size, received no RAİ and no central node dissection.
    - After 2 years, rise in Tg and suspicious central lymph nodes (6mm and 4mm)
    - **What next?**

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