Wie radikal wird im 21. Jahrhundert operiert?

Rupert Prommegger

Sanatorium Kettenbrücke-CSK
Innsbruck

ÖGES-OSDG-2019-Graz

Korea's Thyroid-Cancer "Epidemic" — Screening and Overdiagnosis

Hyeong Sik Ahn, M.D., Ph.D., Hyun Jung Kim, M.P.H., Ph.D., and H. Gilbert Welch, M.D., M.P.H.

The Republic of Korea has provided national health insurance to its 50 million citizens since the 1980s. Although health care expenditures in South Korea's single-payer system are relatively low — accounting for 7.6% of the country's gross domestic product — the system is technologically intensive; among the countries in the Organization for Economic Cooperation and Development, it ranks second in acute care beds per million population, fifth in computed tomography (CT) scanners per million population, and fourth in magnetic resonance imaging (MRI) machines per million population. The country also has a well-developed data infrastructure for both vital statistics (Statistics Korea) and cancer incidence (Korean Central Cancer Registry).

In 1999, the government initiated a national screening program for cancer and other common diseases. This program now provides screening for breast, cervical, colon, gastric, and hepatic

The New England Journal of Medicine
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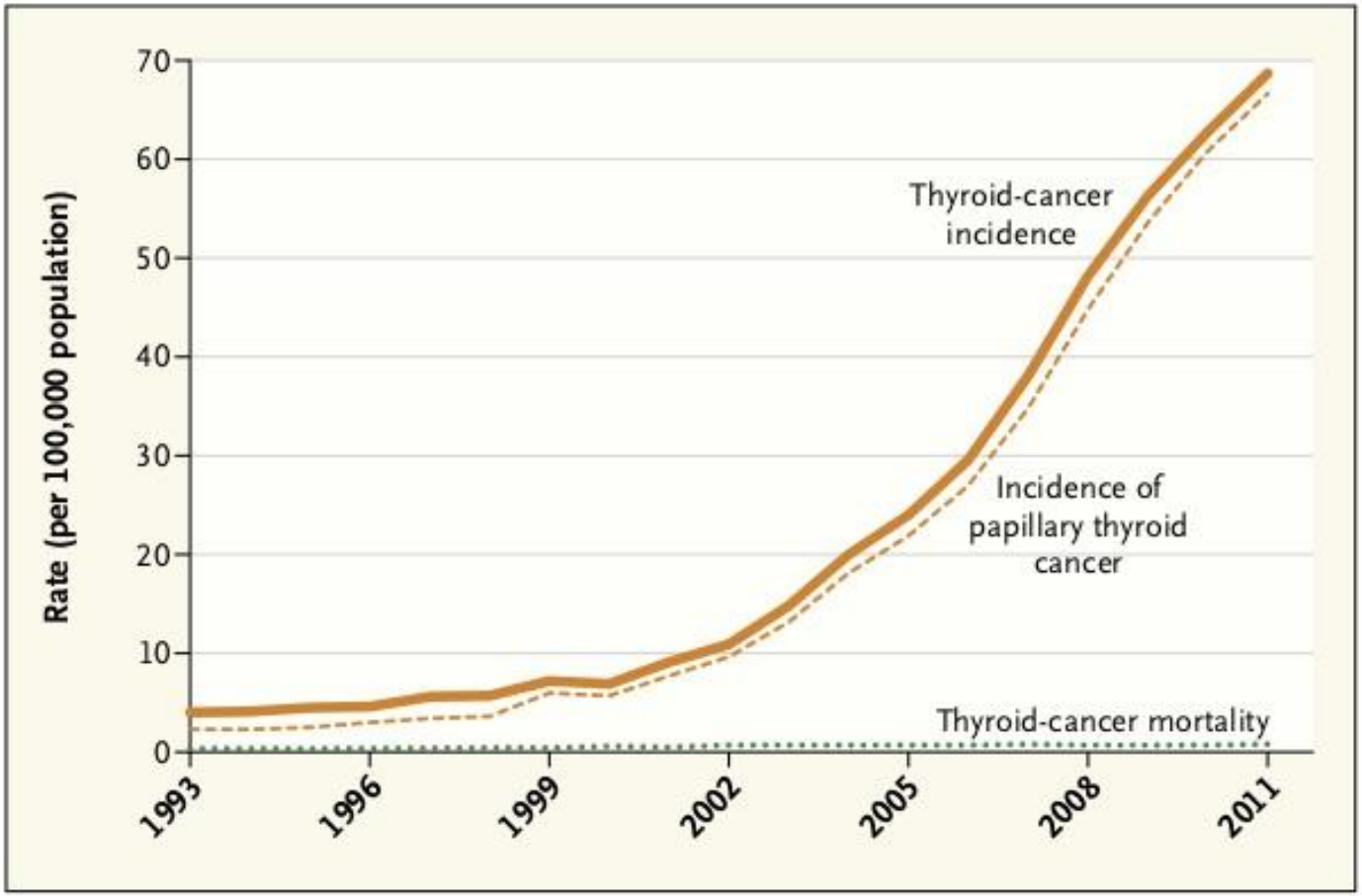


Thyroid-Cancer Incidence and Related Mortality in South Korea, 1993–2011.

Data on incidence are from the Cancer Incidence Database, Korean Central Cancer Registry; data on mortality are from the Cause of Death Database, Statistics Korea. All data are age-adjusted to the South Korean standard population.

Korea: Schilddrüsenkarzinom das Karzinom mit der höchsten Inzidenz

2011: 40.000 Neuerkrankungen in Südkorea

Inzidenz: 100fach höher wie die Mortalität

Tumore <10mm in 10 Jahren von 14% auf 56% angestiegen

Vanderlaan WP. The occurrence of carcinoma of the thyroid gland in autopsy material. NEJM 1947:237:221-2

PTMC: 30% bei Männern, 44,7% bei Frauen

„discripancy between the frequent finding of thyroid cancer at autopsy and ist rarity as a cause of death“

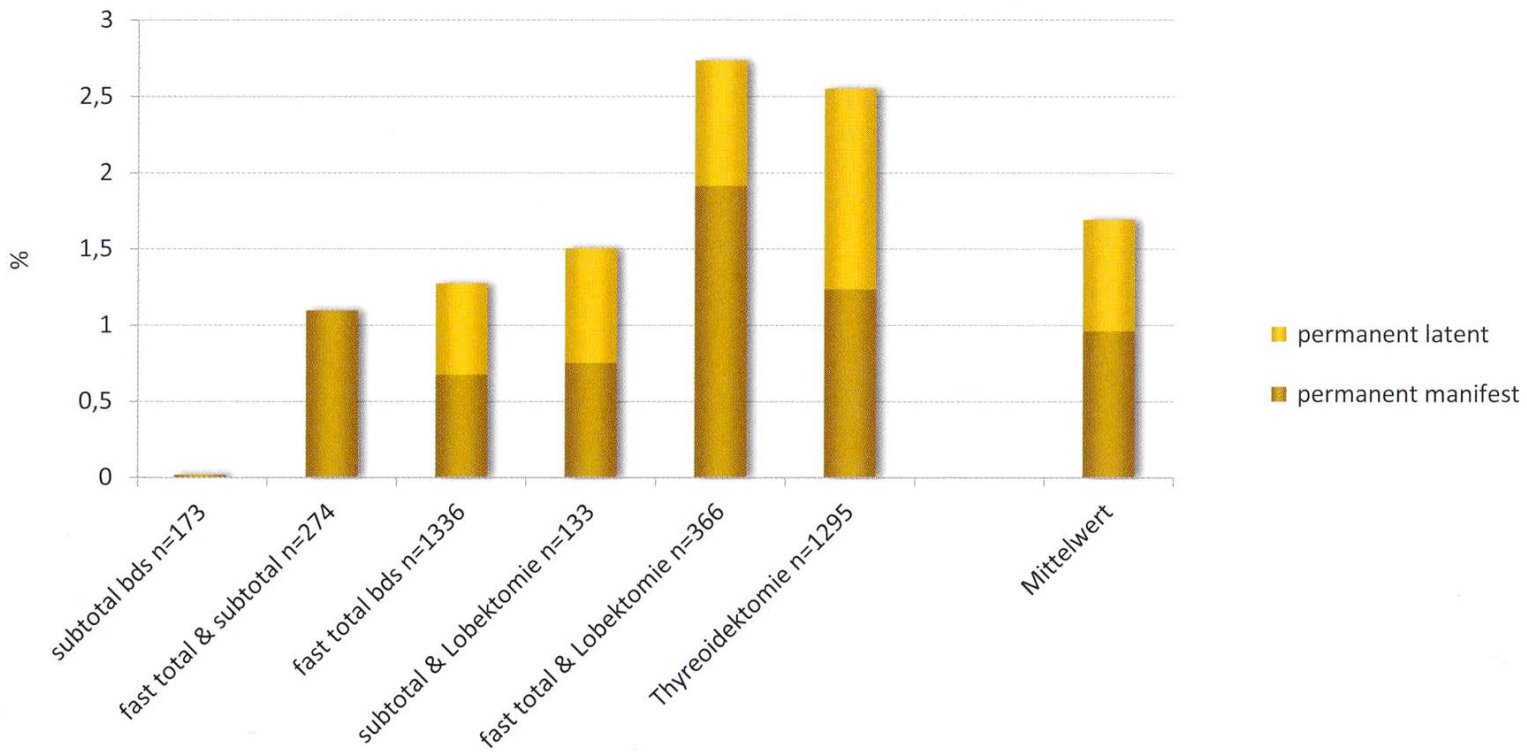
1896-1945: 18668 Obduktionen.: nur in 5 Fällen war Schilddrüsenkarzinom die Todesursache

It is concluded that carcinoma

of the thyroid gland

is a rare cause of death

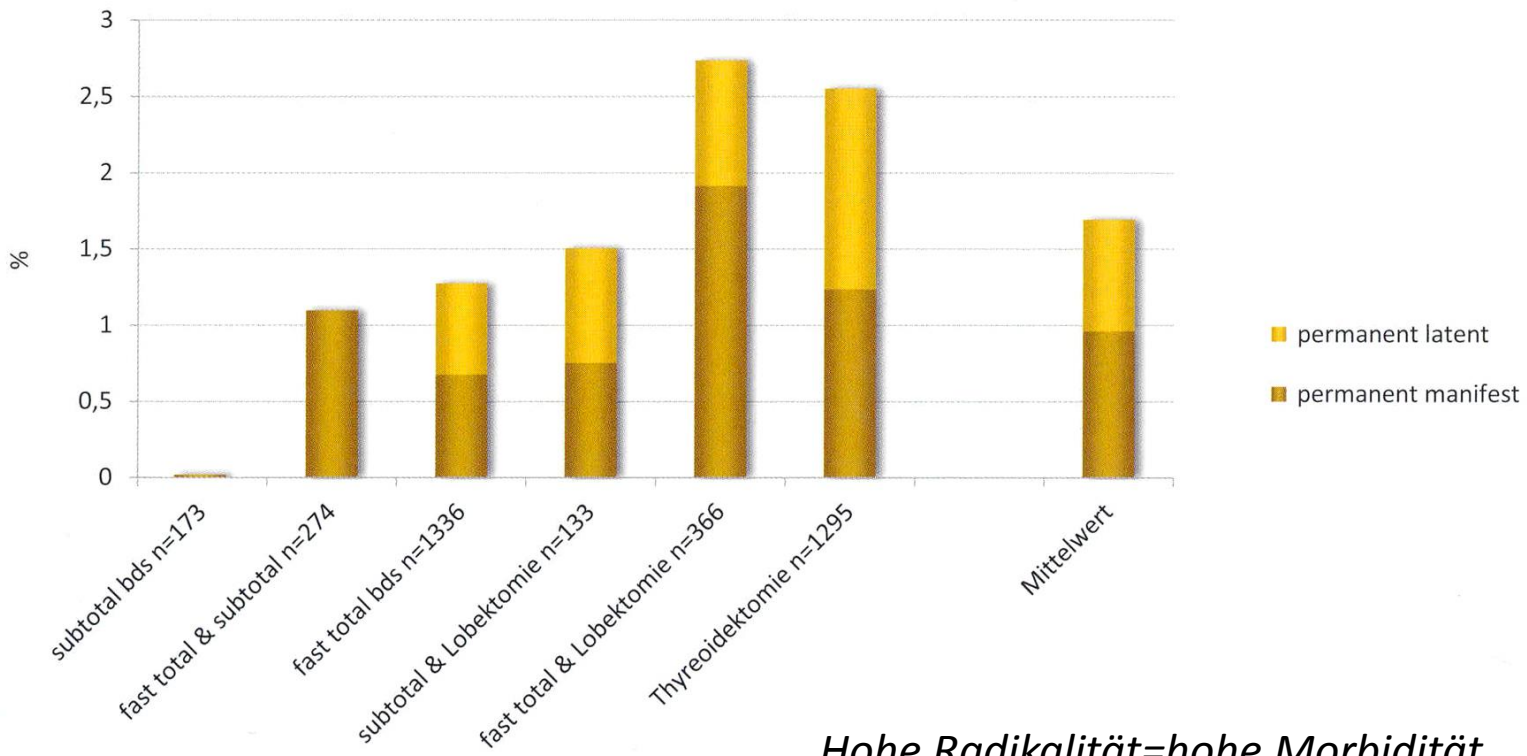
Vanderlan WP NEJM 1947: 237:221-2



M. Hermann, Schilddrüsenchirurgie, Springer 2010

In Korea wurden 70% der PTC durch TT behandelt

11% postop Hypoparathyreoidismus
2% Rekurrensparese



Hohe Radikalität=hohe Morbidität

M. Hermann, Schilddrüsenchirurgie, Springer 2010

Vorteile der tot. Thyroidektomie beim SDCa

- *Effektivität der RJ Therapie*
- *30-40% der PTC sind multifokal*
- *TG nur dann TU Marker wenn TT u. RJ*
- *Tumorlets können dedifferenzieren*

Vorteile der tot. Thyroidektomie beim SDCa

- *Effektivität der RJ Therapie*
- *30-40% der PTC sind multifocal*
- *“subtotal thyroidectomy is for subtotal surgeons”*
- *Tumorlets können dedifferenzieren*

Gesellschaften-Guidelines-DTC

- *British Thyroid Association 2014*
- *European Society of medical oncology (2012)*
- ***American Thyroid Association 2015***

  (1999,2006,2009)
- *CAEK/S3 Leitlinien*
- *ACOASSO (2011)*

ATA-2015

[B2] Goals of initial therapy of DTC

The basic goals of initial therapy for patients with DTC are to improve overall and disease-specific survival, reduce the risk of persistent/recurrent disease and associated morbidity, and permit accurate disease staging and risk stratification, while minimizing treatment-related morbidity and unnecessary therapy. The specific goals of initial therapy are to

1. Remove the primary tumor, disease that has extended beyond the thyroid capsule, and clinically significant lymph node metastases. Completeness of surgical resection is an important determinant of outcome, while residual metastatic lymph nodes represent the most common site of disease persistence/recurrence (**270–272**).

2. Minimize the risk of disease recurrence and metastatic spread. Adequate surgery is the most important treatment variable influencing prognosis, while RAI treatment, TSH suppression, and other treatments each play adjunctive roles in at least some patients (**273–275**).

3. Facilitate postoperative treatment with RAI, where appropriate. For patients undergoing RAI remnant ablation, or RAI treatment of presumed (adjuvant therapy) or known (therapy) residual or metastatic disease, removal of all normal thyroid tissue is an important element of initial surgery (**276**).

[B7] Operative approach for a biopsy diagnostic for follicular cell–derived malignancy

ATA-2015

■ **RECOMMENDATION 35**

(A) For patients with thyroid cancer >4 cm, or with gross extrathyroidal extension (clinical T4), or clinically apparent metastatic disease to nodes (clinical N1) or distant sites (clinical M1), the initial surgical procedure should include a near-total or total thyroidectomy and gross removal of all primary tumor unless there are contraindications to this procedure.

(Strong recommendation, Moderate-quality evidence)

(B) For patients with thyroid cancer >1 cm and <4 cm without extrathyroidal extension, and without clinical evidence of any lymph node metastases (cN0), the initial surgical procedure can be either a bilateral procedure (near-total or total thyroidectomy) or a unilateral procedure (lobectomy). Thyroid lobectomy alone may be sufficient initial treatment for low-risk papillary and follicular carcinomas; however, the treatment team may choose total thyroidectomy to enable RAI therapy or to enhance follow-up based upon disease features and/or patient preferences.

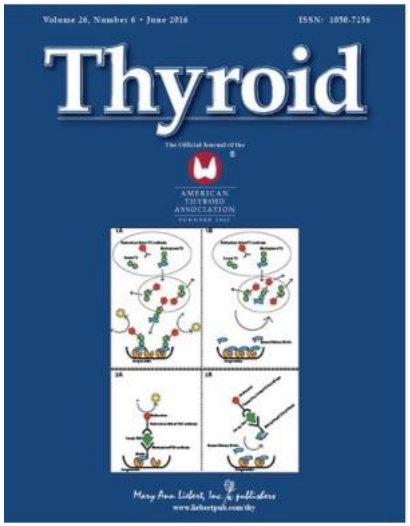
(Strong recommendation, Moderate-quality evidence)

Thyroid, Vol. 26, No. 6 | Thyroid Cancer and Nodules

Frequency of High-Risk Characteristics Requiring Total Thyroidectomy for 1–4 cm Well-Differentiated Thyroid Cancer

Wouter P. Kluijfhout, Jesse D. Pasternak, James Lim, Julie S. Kwon, Menno R. Vriens, Orlo H. Clark, Wen T. Shen, Jessica E. Gosnell, Insoo Suh, and Quan-Yang Duh

Published Online: 13 Jun 2016 | https://doi.org/10.1089/thy.2015.0495



1000 Patienten (2000-2010)
retrospektiv
WDTC 1-4cm Tumordurchmesser

Nach präop. ATA: bei 287 Pat. Lobektomie empfohlen

Davon:	*tall cell*	*1 (0,5%)*
	Angioinvasion	*34(12%)*
	ETE	*48 (17%)*
	R1	*51(18%)*
	N+	*49 (18%)*

Komplettierung 122/287 (43%)
sogar 1-2cm DM in 52/143 (36%)

Kluijfhout et al Thyroid 2016

NIFTP(NonInvasiveFollicular Thyroid Neoplasm with Papillary-like Nuclear features)

Was ist NIFTP?

Gekapselte follikuläre Variante des PTC

(jetzt: „Nichtinvasive follikuläre Neoplasie mit papillärähnlichen Kernveränderungen)

Was muss man tun?

Nikiforov 2016

*Nikiforov YE, Seethala RR, Tallini G, Baloch ZW, Basolo F, Thompson LD, Barletta JA, Wenig BM, Al Ghuzlan A, Kakudo K, et al. 2016 Nomenclature revision for encapsulated follicular variant of papillary thyroid carcinoma: a paradigm shift to reduce overtreatment of indolent tumors. JAMA Oncology **2** 1023–1029. (https://doi.org/10.1001/jamaoncol.2016.0386)*

109 Patienten
NIFTP DM>1cm
Keine RJ Therapie
Keine TSH Suppression

Kein Rezidiv
Keine Metastasen

NIFT-P: Are they indolent tumors? Results of a multi-institutional study.
Surgery 2019 165: 12-16
Cereau N, Greilsamer T, Mirallie E et al

Prospektiv-multizentrische Datenerhebung zum NIFT-P

Können NIFT-P metastasieren?

(ist damit ein reduziertes Resektionsausmaß gerechtfertigt)

NIFT-P: Are they indolent tumors? Results of a multi-institutional study.
Surgery 2019 165: 12-16
Cereau N, Greilsamer T, Mirallie E et al

9 Zentren in Frankreich mit endokrin. Chirurgischer Spezialisierung
363 Patienten mit Experten-gesichertem NIFT-P (2005-2015)
6% der PTC waren NIFT-P
Medianer Follow UP: 55 Monate

95% der Pat.: primär od. sekundär totale Thyroidektomie
37%: prophylaktische Lymphknotendissektion
65 Patienten (18%) hatten zusätzlich zum NIFT-P ein klassisches PTMC
2 Patienten mit NIFT-P und PTMC hatten primär (1) oder als Rezidiv (1) LK Meta <1cm

NIFT-P: Are they indolent tumors? Results of a multi-institutional study.
Surgery 2019 165: 12-16
Cereau N, Greilsamer T, Mirallie E et al

Prospektiv-multizentrische Datenerhebung zum NIFT-P

10 Pat. mit NIFT-P und LK Meta beschrieben
1 Pat. mit NIFT-P und Lungenmetastase
18% haben ein assoziiertes PTMC mit unklarem Metastasierungspotential
Beobachtungszeiträume sind noch relativ kurz
Keine Nachsorgestandards zum NIFT-P

Autoren mahnen zur Vorsicht hinsichtlich des eingeschränkten Vorgehens

NIFT-P: Are they indolent tumors? Results of a multi-institutional study.
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Cereau N, Greilsamer T, Mirallie E et al

Prospektiv-multizentrische Datenerhebung zum NIFT-P

Aufgrund der differenten Molekularpathologie der NIFT-P zum PTC und ihrem unterschiedlichen Metastasierungspotential ist davon auszugehen, dass es sich beim NIFT-P tatsächlich um eine ***eigene (benigne) Entität handelt*** *(wie foll. Adenom)*

NIFT-P ist allerdings weder sonographisch noch cytologisch (?noch im Schnellschnitt) präoperativ fassbar

Somit nur relevant nach Hemithyroidektomie in Hinblick auf die Entscheidung zur TT

Surgery. 1992 Dec;112(6):1130-6; discussion 1136-8.

Follicular thyroid carcinoma with capsular invasion alone: a nonthreatening malignancy.

van Heerden JA[1], Hay ID, Goellner JR, Salomao D, Ebersold JR, Bergstralh EJ, Grant CS.

Author information

Abstract

BACKGROUND: The study was designed to determine whether invasion of the tumor capsule, in the absence of vascular invasion (VI), was significant in predicting cause-specific mortality in follicular thyroid carcinoma (FTC).

METHODS: Seventy-two patients with FTC were treated by us during 1971 through 1985. In 65 cases the tumors could be classified as either showing capsular invasion (CI) alone (20) or VI, with or without CI, (45). Median follow-up of 45 survivors was 11 years; 12 patients died of FTC.

RESULTS: The 10-year occurrence rates for cause-specific mortality and distant metastases were 28% and 19%, respectively, for patients with VI. Comparable rates for the patients with CI were 0% ($p = 0.019$) and 0% ($p = 0.052$), respectively. By univariate analysis, higher rates of cause-specific mortality were significantly associated with distant metastases at diagnosis ($p < 0.0001$), the presence of VI ($p = 0.019$), and moderate or marked microinvasion ($p = 0.019$). In stepwise multivariate analyses, only distant metastases at diagnosis had independent prognostic significance ($p < 0.0001$) in the prediction of cause-specific mortality. In a Cox model, adjusting for distant metastases at diagnosis, the presence of VI was of borderline significance ($p = 0.06$) in predicting cause-specific mortality.

CONCLUSIONS: FTC, diagnosed on the basis of CI alone, did not result in either distant metastases or cancer-related death. The dominant determinant of cause-specific mortality was the presence of distant metastases at diagnosis.

01.02.2014 | Review Article | Ausgabe 2/2014

Minimally invasive follicular thyroid cancer (MIFTC)—a consensus report of the European Society of Endocrine Surgeons (ESES)

Zeitschrift: Langenbeck's Archives of Surgery > Ausgabe 2/2014

Autoren: Gianlorenzo Dionigi, Jean-Louis Kraimps, Kurt Werner Schmid, Michael Hermann, Sien-Yi Sheu-Grabellus, Pierre De Wailly, Anthony Beaulieu, Maria Laura Tanda, Fausto Sessa

Zum Volltext bitte einloggen

ESES Konsens-Hemithyroidektomie beim MIFTC

Nur Kapselinvasion/keine Gefäßinvasion
<45a
Tumor <40mm
keine LK oder Fernmetastasen

Zusammenfassung

Tumorentitäten mit günstiger Biologie (NIFTP/MIFTC)

über 50% der diagnostizierten SD-Karzinome <1cm

Trotzdem Vorsicht-Pathologie/Follow-up?

reduzierte Radikalität- reduzierte Morbidität

Prommegger-Sanatorium Kettenbrücke CSK-IBK