SERBA-SERBI

KANKER TIROID

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RS. GADING PLUIT

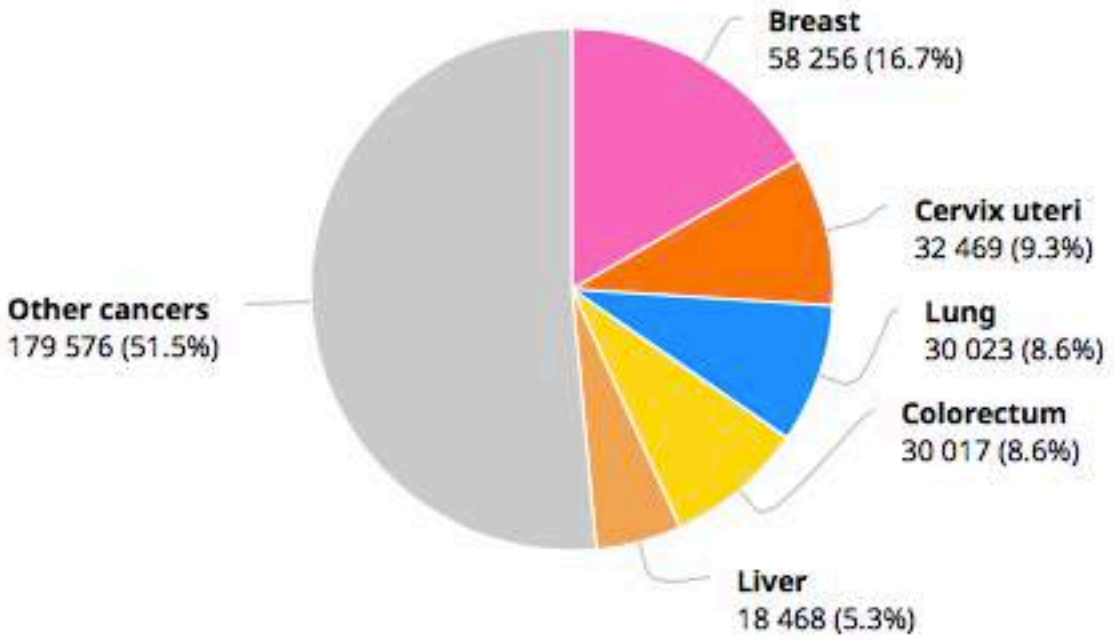
International Agency for Research on Cancer

World Health Organization

Indonesia

Source: Globocan 2018

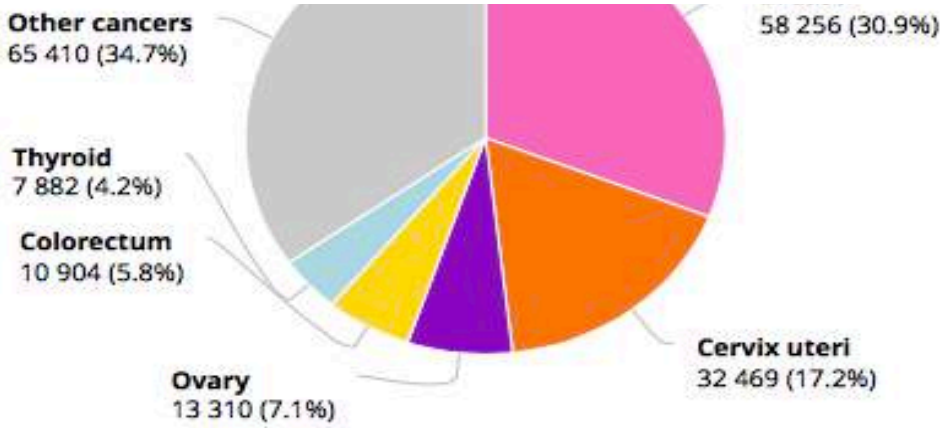
Number of new cases in 2018, both sexes, all ages



Total: 348 809

Summary statistic 2018

	Males	Females	Both sexes
Population	134 273 304	132 521 684	266 794 986
Number of new cancer cases	160 578	188 231	348 809
Age-standardized incidence rate (World)	134.8	139.6	136.2
Risk of developing cancer before the age of 75 years (%)	14.5	14.3	14.3
Number of cancer deaths	108 186	99 024	207 210
Age-standardized mortality rate (World)	94.2	76.1	84.1
Risk of dying from cancer before the age of 75 years (%)	10.0	8.2	9.1
5-year prevalent cases	308 850	466 270	775 120
Top 5 most frequent cancers excluding non-melanoma skin cancer (ranked by cases)	Lung Colorectum Liver Nasopharynx Prostate	Breast Cervix uteri Ovary Colorectum Thyroid	Breast Cervix uteri Lung Colorectum Liver



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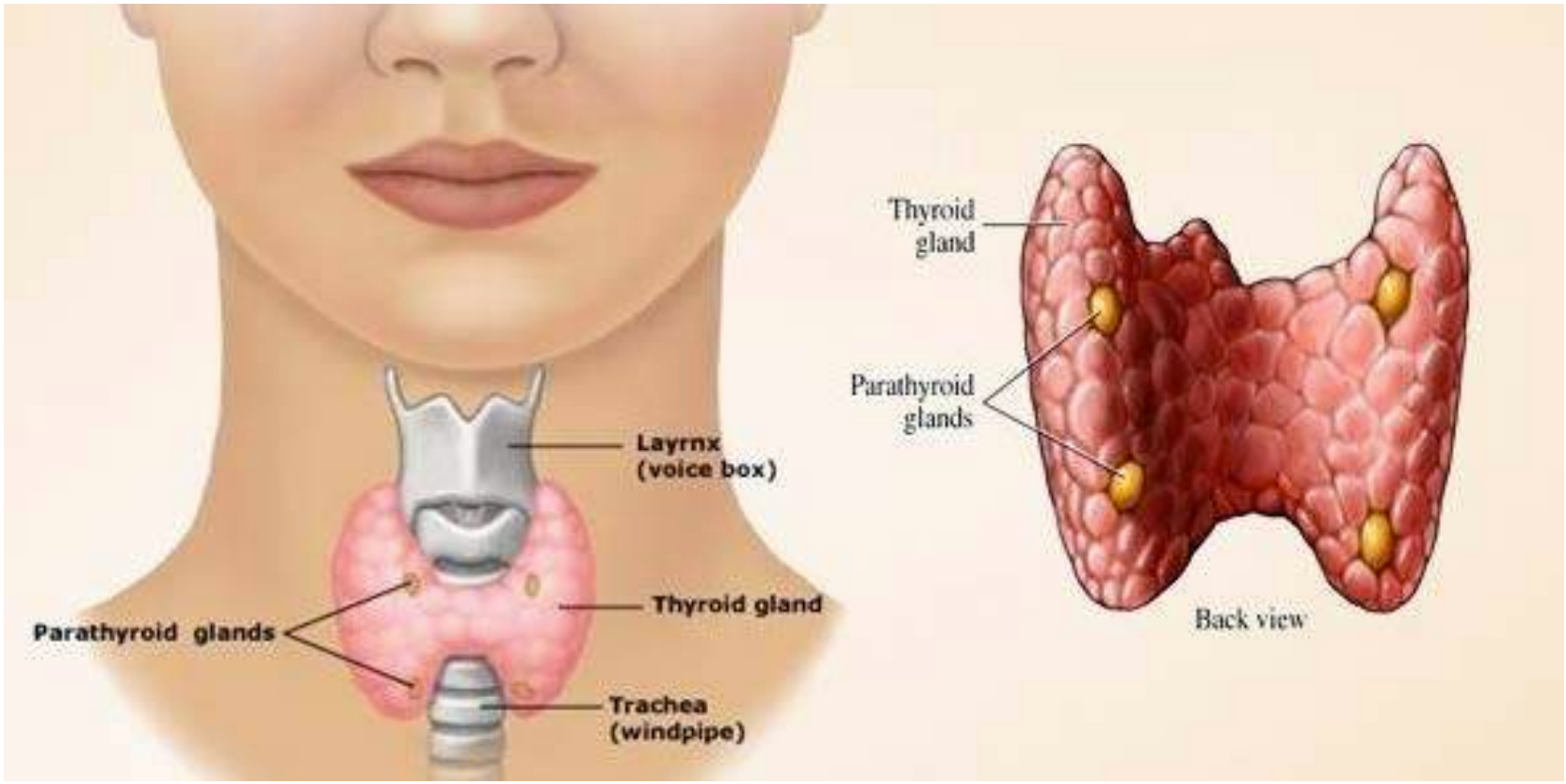
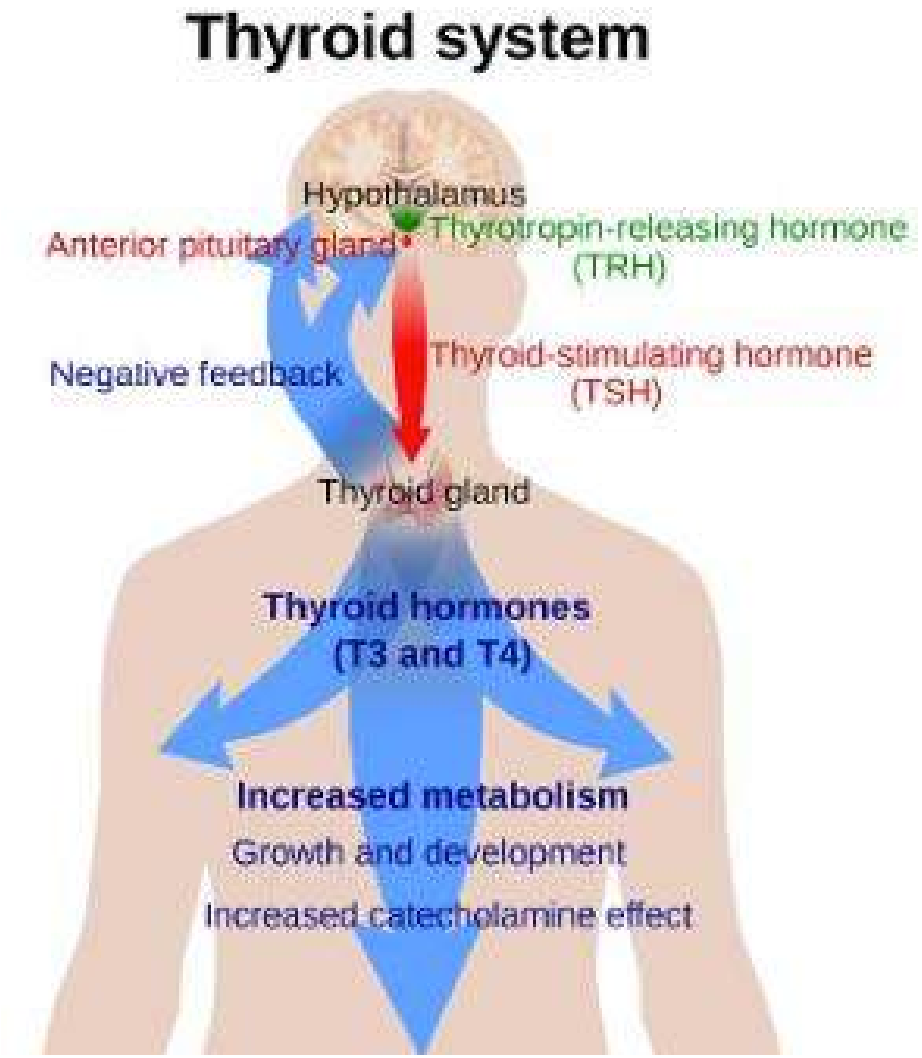
TIROID


Layrnx
(voice box)
Thyroid gland
Parathyroid glands
Trachea
(windpipe)
Thyroid
gland
Parathyroid
glands
Back view



FUNGSI KELENJAR TIROID

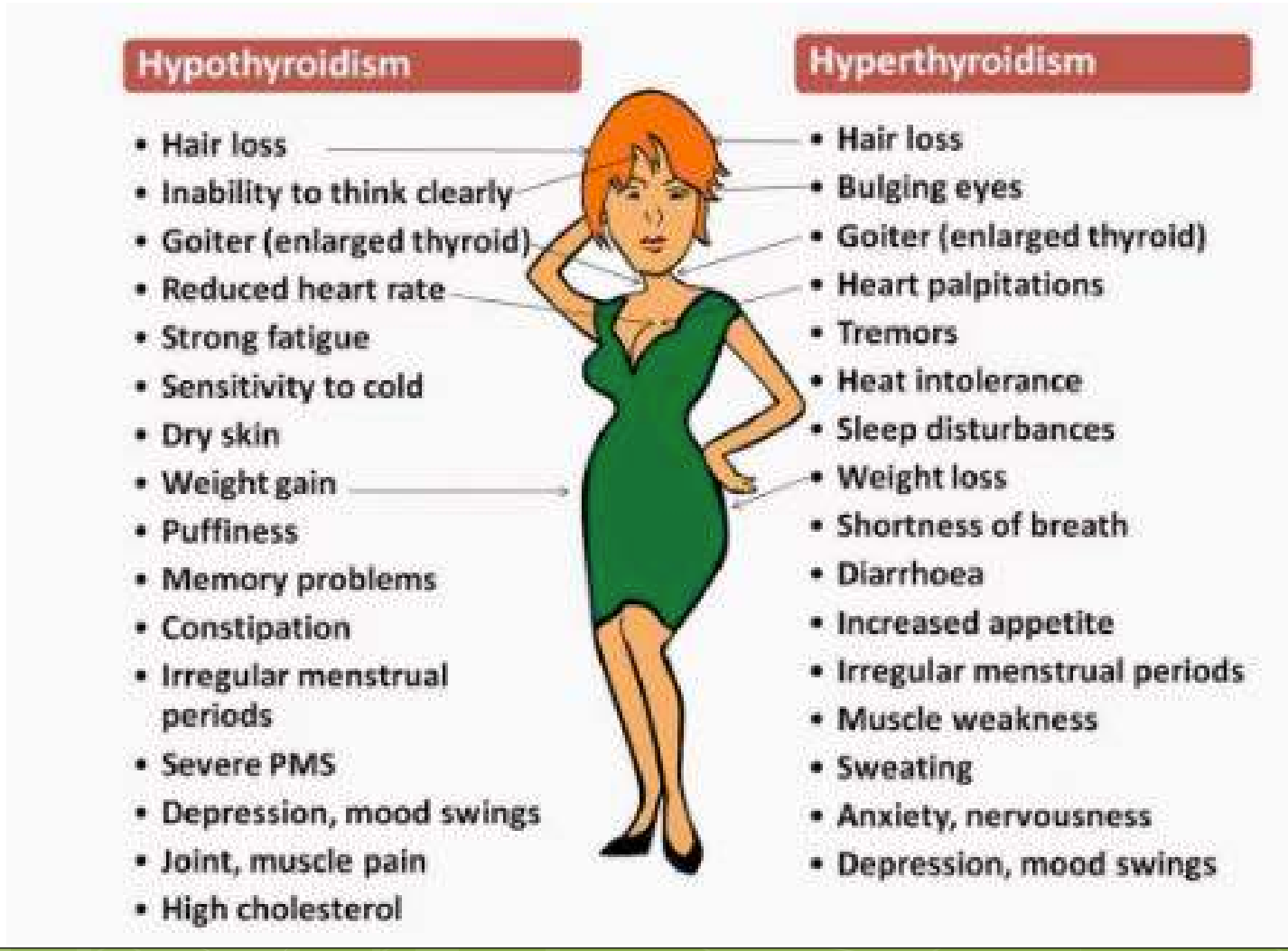
Menghasilkan hormon triiodotironin (T3),tiroksin (T4), kalsitonin.

Bahan baku: yodium

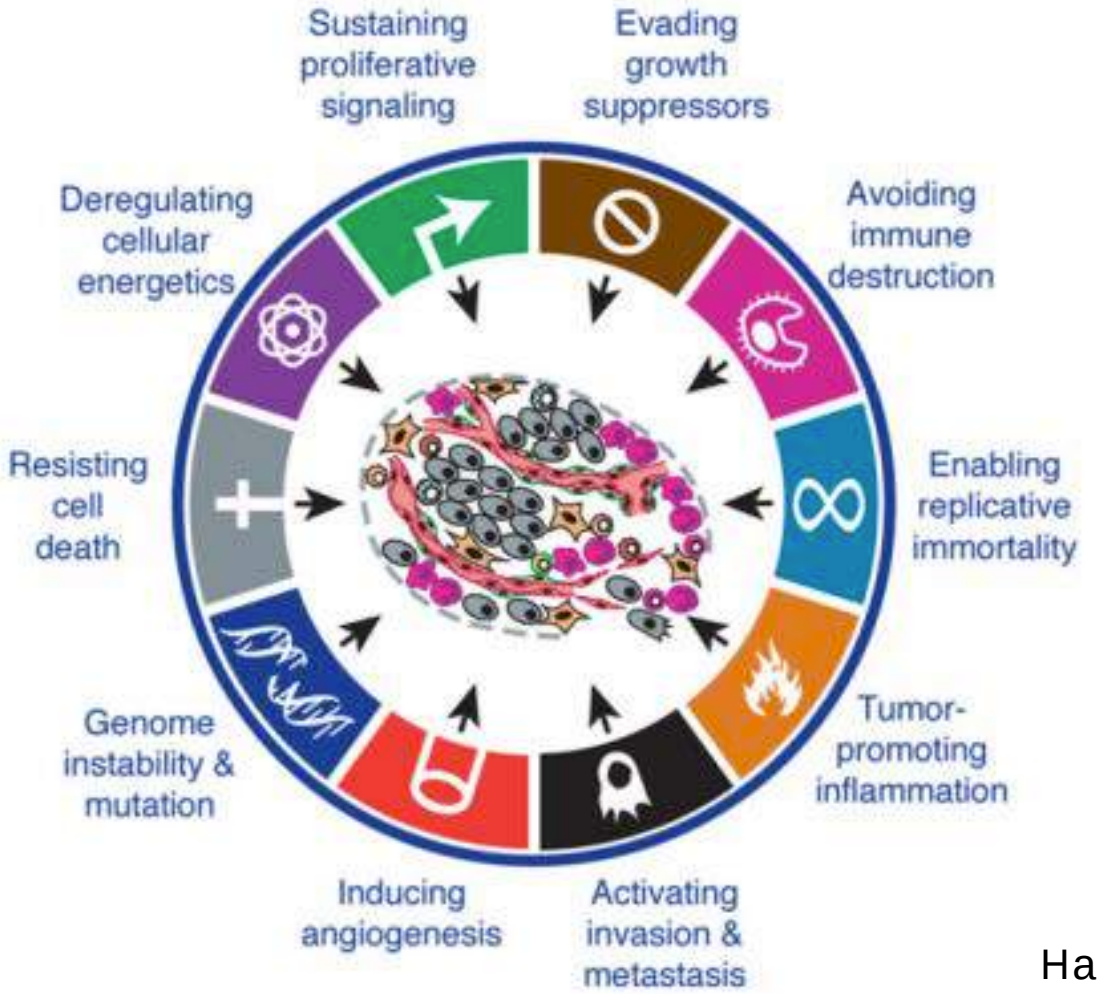
FUNGSI HORMON TIROID

1. Metabolisme tubuh
2. Pertumbuhan
3. Perkembangan sel
4. Pengaturan kalsium

KELAINAN HORMON TIROID

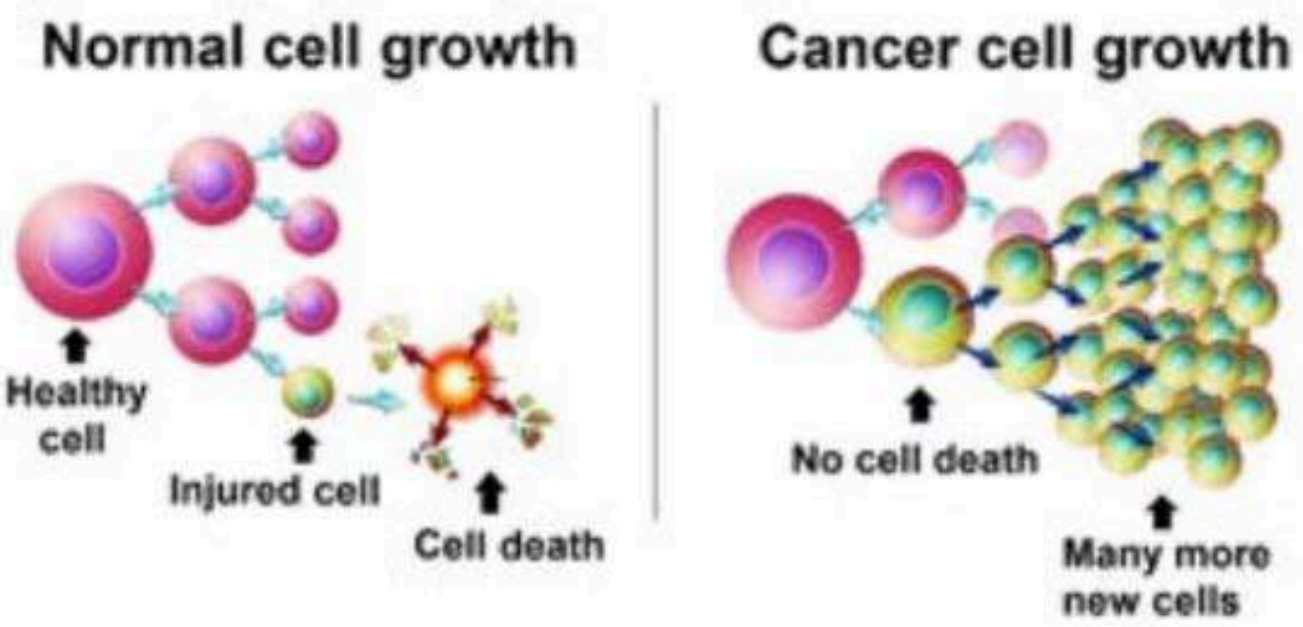


HALLMARKS OF CANCER



Hannahan&Weinberg, 2011

KANKER TIROID



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TUMOR GANAS (KANKER) vs TUMOR JINAK

KANKER

- Pertumbuhan sel tidak terkendali
- Invasi: menyebar ke sekitar (organ berdekatan, pembuluh darah, kelenjar)
- Metastasis: Penyebaran jauh

TUMOR JINAK

- Pertumbuhan sel lambat
- Tidak invasi
- Tidak metastasis

FAKTOR RESIKO KANKER TIROID

- Obesitas
- Riwayat keluarga dengan kanker tiroid
- Riwayat penyakit tiroid atau penyakit keturunan sbb:
  - Familial Adenomatous Polyposis (FAP)
  - Multipel Endocrine Neoplasia (MEN)
  - Carney Complex
  - Cowden's syndrome
- Riwayat radiasi daerah kepala leher

GEJALA

- Benjolan atau nodul daerah leher
- Nyeri daerah leher
- Perubahan suara
- Kesulitan bernafas
- Kesulitan menelan
- Hasil lab darah yang abnormal

PEMERIKSAAN MEDIS

- Dokter bedah/ dokter THT-KL/ dokter Penyakit Dalam ± Subsp Endokrin (KEMD) - Pemeriksaan fisik oleh dokter
- **Laboratorium** darah: T3, T4, tiroglobulin, TSH, CEA, calcitonin
- **Imaging**: ultrasound, Radioiodine scan, MRI, CT, FDG PET-CT
- **Biopsi**: FNA

HASIL ULTRASOUND

Tepi ireguler
Mikrokalsifikasi
Ukuran lonjong/memanjang
Peningkatan aliran darah

Type of finding on ultrasound results		Will an FNA biopsy be done?
Solid nodule • With abnormal features • Without abnormal features	→ →	 Yes, when nodule is 1.0 cm or more Yes, when nodule is 1.5 cm or more
Mixed cystic-solid nodule (fluid & solid part) • With abnormal features • Without abnormal features	→ →	 Yes, with solid part more than 1.0 cm Yes, with solid part more than 1.5 cm
Spongiform (sponge-like) nodule	→	Yes, when nodule is 2.0 cm or more
Simple cyst (fluid-filled nodule)	→	No FNA (only treat cyst as needed)
Suspicious cervical lymph node	→	Yes, FNA of cervical lymph node with or without FNA of other thyroid nodule or nodules

JENIS KANKER TIROID

- Papiler
- Folikuler
- Hurthle
- Medullary
- Anaplastik

TERAPI

- OPERASI – BEDAH KEPALA LEHER
- RADIASI INTERNA – KEDOKTERAN NUKLIR
- RADIASI EKSTERNA – RADIOTERAPI/ ONKOLOGI RADIASI
- KEMOTERAPI, TARGETED THERAPY – HEMATO ONKOLOGI MEDIK

STADIUM

T	**Primary Tumor**
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor ≤2 cm or less in greatest dimension limited to the thyroid
T1a	Tumor ≤1 cm in greatest dimension limited to the thyroid
T1b	Tumor >1 cm but ≤2 cm in greatest dimension limited to the thyroid
T2	Tumor >2 cm but ≤4 cm in greatest dimension limited to the thyroid
T3	Tumor ≥4 cm or with extrathyroidal extension
T3a	Tumor ≥4 cm in greatest dimension limited to the thyroid
T3b	Tumor of any size with gross extrathyroidal extension invading only strap muscles (sternohyoid, sternothyroid, thyrohyoid or omohyoid muscles)
T4	Advanced disease
T4a	Moderately advanced disease; tumor of any size with gross extrathyroidal extension into the nearby tissues of the neck, including subcutaneous soft tissue, larynx, trachea, esophagus, or recurrent laryngeal nerve
T4b	Very advanced disease; tumor of any size with extension toward the spine or into nearby large blood vessels, invading the prevertebral fascia, or encasing the carotid artery or mediastinal vessels

STADIUM

N		**Regional Lymph Nodes**
NX		Regional lymph nodes cannot be assessed
N0		No evidence of locoregional lymph node metastasis
	N0a	One or more cytologically or histologically confirmed benign lymph nodes
	N0b	No radiologic or clinical evidence of locoregional lymph node metastasis
N1		Metastasis to regional nodes
	N1a	Metastasis to level VI or VII (pretracheal, paratracheal, or prelaryngeal/Delphian, or upper mediastinal) lymph nodes. This can be unilateral or bilateral disease
	N1b	Metastasis to unilateral, bilateral, or contralateral lateral neck lymph nodes (levels I, II, III, IV, or V) or retropharyngeal lymph nodes

M	**Distant Metastasis**
M0	No distant metastasis
M1	Distant Metastasis

STADIUM

FOLIKULER & PAPILER

Age – younger than 45 years

Stage	Details of that stage
I	• Tumor of any size and cancer may have spread to nearby tissue or lymph nodes
II	• Tumor of any size and cancer has spread to distant parts of the body

FOLIKULER & PAPILER

Age – 45 years and older

Stage	Details of that stage
I	• Tumor is only in the thyroid and 2 cm or smaller
II	• Tumor is only in the thyroid and larger than 2 cm but smaller than 4 cm
III	• Tumor is only in the thyroid and 4 cm or larger • Tumor is of any size and cancer spread to nearby tissue (not lymph nodes) • Tumor is of any size and cancer spread to nearby tissue or lymph nodes in the neck near the trachea (windpipe) or larynx (voice box)
IVA	• Tumor of any size and cancer has spread to nearby tissue in the neck or spread to nerves that lead to the larynx, and possibly nearby lymph nodes • Tumor of any size that has spread to nearby tissue and lymph nodes in the neck or those in the upper chest
IVB	• Cancer has spread to tissue near the spinal column or large blood vessels in the chest • Cancer may have spread to the lymph nodes
IVC	• Tumor of any size and cancer has spread to distant parts of the body and may have spread to the lymph nodes

MEDULER

	T	N	M
Stage I	T1	Any N	M0
Stage II	T2	N0	M0
	T3	N0	M0
Stage III	T1-T3	N1a	M0
Stage IVA	T4a	Any N	M0
	T1-T3	N1b	M0
Stage IVB	T4	N0	M0
Stage IVC	Any T	Any N	M1

ANAPLASTIK

Stage	Details of that stage
IVA	• Tumor only in the thyroid and cancer may have spread to the lymph nodes
IVB	• Tumor has grown outside the thyroid and may have spread to the lymph nodes
IVC	• Cancer has spread to distant parts of the body and may have spread to the lymph nodes

PENCEGAHAN

- Pola hidup sehat
  - *Living style*: sendentaris
  - *Eating style*
  - Kelola stress
- *Self awareness*
  - Kenali faktor resiko
  - Thyroid self-test
- *Screening?*

TAKE HOME MESSAGE

- Mencegah lebih baik daripada mengobati
- Kanker bisa diobati dan bisa sembuh

THANK YOU

HATI YANG GEMBIRA

adalah

OBAT YANG MANJUR

PERTANYAAN?

Referensi:
1. www.nccn.org
2. www.thyroidawareness.com