# Is prophylactic neck dissection for papillary Ca of the thyroid justifiable ?

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# Is prophylactic neck dissection justifiable ?

- No

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- Maybe

- ( T`s  and C`s apply )

# How do we treat papillary ca ?

- 1. Total thyroidectomy
- 2. Neck dissection only if nodes are involved
- 3. Ablative dose or doses of Radioactive Iodine
- 4. Hormone replacement with Eltroxin / Euthyrox
- 5. Follow up with Clinical exam +/- Ultrasound , Thyroglobulin and Scintigraphy

# How do we treat Papillary ca ?

- Total thyroidectomy

- – Possibility of multi-centricity
- – To prevent recurrences in neck
- – To decrease volume that has to be ablated by RAI

# How do we treat Papillary ca

- Ablative dose of radioactive Iodine
- -To destroy any residual thyroid tissue in neck
- - To diagnose and destroy any metastatic disease
- - To enable easy follow up with scintigraphy and Thyroglobulin levels

# How do we treat Papillary ca

- Use of Thyroid Hormone replacement

- -For patients wellbeing
- - to decrease TSH that might stimulate further growth of tumour

# How do we treat Papillary ca ?

- Regular follow up

- – Clinical examination
- – Ultrasound
- – Thyroglobulin
- – Scintigraphy
- – PET scan

# How do we treat Papillary ca ?

- Recurrent disease is treated by repeating ablative dose of RAI
- If recurrent disease doesn`t take up Iodine surgery is indicated
- Recurrent disease can also be treated by external beam radiotherapy

# Those damn Japanese

- How is papillary ca treated in Japan ?

# The Japanese way

- 1. Partial thyroidectomy
- 2. Extensive central compartment neck dissection
- 3. No RAI
- 4. No thyroid hormone replacement if not indicated.

# Reasoning behind the Japanese way

- Total thyroidectomy not indicated due to fact that they seldom see recurrent disease in thyroid.
- Probably not necessary for thyroid hormone replacement
- RAI treatment seen as hazardous and expensive

# The Japanese way

- Prophylactic neck dissection done as standard of care
- – The occurrence of occult nodal metastases ranges from 18 – 92 % in different series from the east.
- – In spite of this most of the recurrences occur in the neck nodes and not elsewhere
- – This necessitates very extensive neck node dissections

# The Japanese way

- To date there are no studies comparing the outcome of patients who have had a prophylactic neck dissection and who have recurrent disease versus patients who have not had a prophylactic neck dissection and then develop disease in the neck.

# The Japanese way

- Ultrasound investigation of the draining lymph node bed has a positive predictive value and specificity of 92 % and 98 % respectively in a study on 5805 patients who underwent neck dissection – but the negative predictive value and sensitivity were low at 37 % and 12 % respectively. – this means that in 63 % the neck nodes were involved but not demonstrated on ultrasound

# The Japanese way

- Lymph node spread is to the central , lateral and mediastinal compartments
- It is believed that spread first takes place to the central compartment and then to the lateral compartment
- Central compartment lymph node dissections are done routinely and can be done without extension of the wound
- If the lateral compartment is dissected the wound has to be extended
- The mediastinal compartment is not routinely dissected

# The Japanese way

- Markers of possible occult nodal disease

- – If primary tumour is larger than 3 cm on high resolution ultrasound
- – If there is any indication of extra –thyroidal extension.

- This would also indicate that a total thyroidectomy should be done.

# The Japanese way

- Due to a high recurrence rate in the neck nodes the neck dissection must be extensive and meticulous

- This leads to much higher rate of complications

# The Japanese way

- Complications

- – Recurrent laryngeal and superior laryngeal nerve injuries
- – Hypoparathyroidism
- – Thoracic duct injuries with lymph / chyle leakage into the neck
- – Accessory nerve damage

# Is Prophylactic neck dissection for Papillary ca of the thyroid justifiable?

- Probably not

# My recommendations

- Radical neck dissection is indicated in clinically involved neck nodes
- Due to the relatively high incidence of occult metastatic disease in neck nodes the nodal disease has to be addressed.
- Radical neck dissection is only beneficial if done very meticulously and even then has a relatively high recurrence rate – with associated higher incidence of complications

# My recommendations

- Radioactive Iodine is a very effective way of dealing with occult neck nodal metastases
- Radioactive Iodine doesn`t have the devastating complications that extensive surgery can have
- Radioactive Iodine is cost effective
- If radioactive Iodine fails surgery can always be done in a “virgin "neck