

# Oncology rehabilitation: Bowen therapy approach to post radiotherapy patients

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Member of

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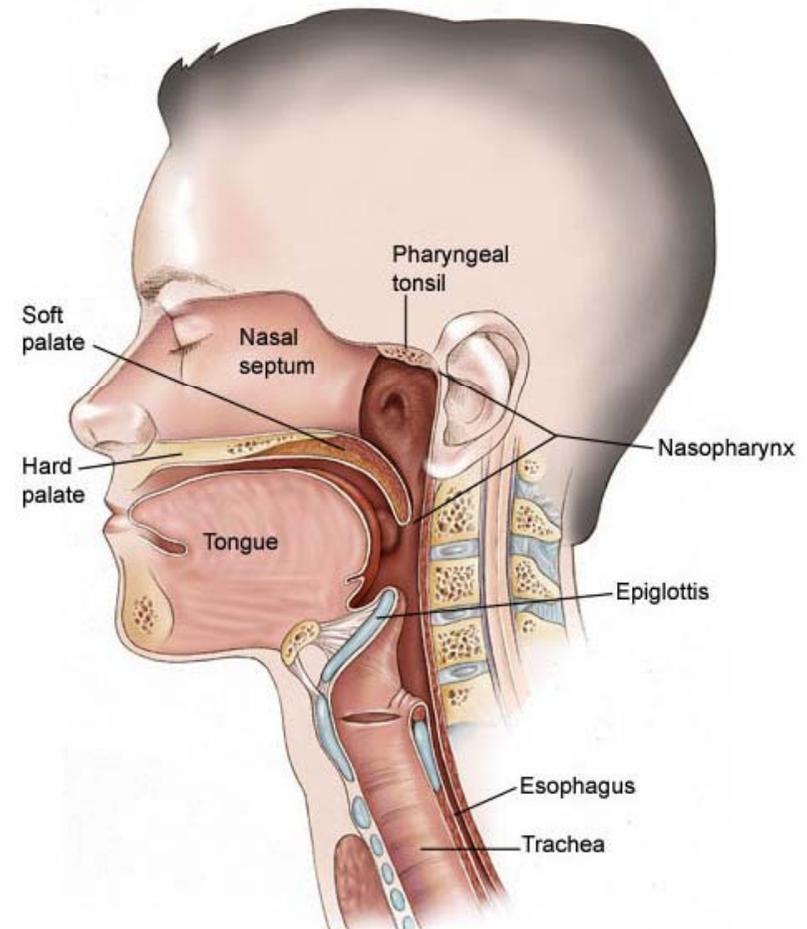


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# Nasopharyngeal carcinoma (NPC)

- Nasopharynx
  - at the upper part of the pharynx (throat) behind the nose
  - an opening on each side of the nasopharynx (called the Eustachian tube opening) leads into the middle ear on each side



# NPC -- Epidemiology

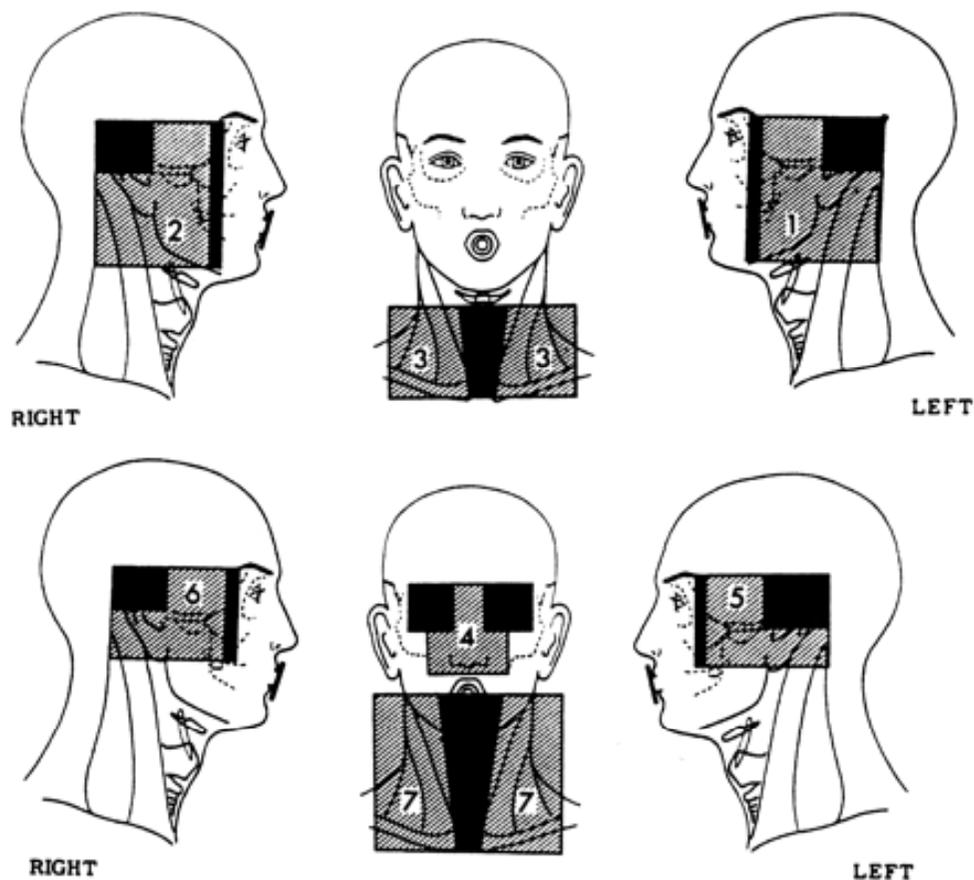
- More common in Asia and North Africa, especially in Southeast China
- How about in HK?
- Rank 7 in both incident rate and mortality rate
  - 914 new cases in 2009, 3.5% of all cancer
  - 359 death registered, 2.8% of all cancer

# NPC -- Treatment

- Multidisciplinary Approach
- Mainly radiation therapy,
- often given in combination with chemotherapy
- Surgery to remove lymph nodes after chemoradiotherapy or to treat NPC that has recurred (come back after initial treatment)

# NPC -- Radiotherapy

- Areas expose to radio therapy
- Involving the TMJ, neck and shoulder muscles and soft tissues



# NPC - Problems in Occupational Performance

- BADL
  - Feeding discomfort
  - Dressing pullover
- IADL
  - Hanging clothes
- Work
  - Driving
  - Working postural
- Limited neck AROM and weakness
- Pain

# Bowen Therapy (BT)

- Bowen therapy is named after Tom Bowen (1916-1982), who created a form of bodywork in Geelong, Australia.
- A soft tissue remedial therapy

(ISBT, 2005)

# Bowen Therapy (BT)

- Move
- A cross fiber move of the fascia or connective tissues
- Pain-free, gentle rolling moves over muscle, ligament, tendon and other connective tissues in specific parts of the body to initiate relaxation of muscle and reduction of nerve pressure

(ISBT, 2005; Baker, 2009)



# BT - Treatment Effect

- Reports of after BT treatment clients have improvements in:

- Pain

(Kinnear & Baker, 1999; Carter, 2002; Baker, 2008; Godfrey, 2008; James, 2008)

- Range of motion (ROM)

(Kinnear & Baker, 1999; Carter, 2002; Godfrey, 2008; Marr, Barker, Lambon & Perry, 2011)

- Oedema

(Rattray, 2002)

- Heart rate

(Whittaker et al., 1997)

- Respiration

(Rattray & Godfrey, 2002)

- Injury rates and functional recovery

(Kinnear & Baker, 1999; Carter, 2002; Rattray, 2002)



# Case Sharing

## Demographic information

- Mr. Y, 40 years old
- A clerical worker
- Suffered from NPC on 2005,
- Received radiotherapy from April, 2005 with a total 32 sessions completed + chemotherapy

# Case Sharing

## Problems

- Limited jaw range (20% to 30%)
- Spam like feeling over neck and oral area
- Occupational Performance
  - Feeding speed
  - Can't drink a can of soft drinks orally, need to use straw to compensate; unable to bite an apple, needed cut into small pieces
  - Pain, tired and tight over neck and shoulder after working the morning session
  - Increase time in dressing pullover shirt

# Case Sharing

## Problems

- Performance Component
  - He suffered limited in AROM of neck and shoulder in all direction
- The limitations will be presented together with the post treatment in the result part

# Case Sharing

## BT treatment regime

- One per week for 5 weeks
- Total 5 BT treatment received
- Sequence received
  - 1,4,2,3, LNS, TMJ, Shoulder

# Improvement in Performance Component

| Neck AROM                               | Reference *<br>range | Pre-<br>BT | Post 5 session of BT<br>Tx |
|---|----------------------|------------|----------------------------|
| Flexion                                 | 0-45                 | 35         | 65                         |
| Extension                               | 0-45                 | 30         | 35                         |
| Lateral flexion (side<br>neck flexion ) | 0-45                 |            |                            |
| Right                                   |                      | 15         | 30                         |
| Left                                    |                      | 12         | 40                         |
| Rotation                                | 0-60                 |            |                            |
| Right                                   |                      | 45         | 45                         |
| Left                                    |                      | 40         | 50                         |

\* (Pedretti, 1996)

| Shoulder AROM          | Reference range | Pre-BT | Post 5 session of BT Tx |
|------------------------|-----------------|--------|-------------------------|
| Forward flexion        | 0-170           |        |                         |
| Right                  |                 | 140    | 160                     |
| Left                   |                 | 150    | 165                     |
| Backward extension     | 0-60            |        |                         |
| Right                  |                 | 40     | 50                      |
| Left                   |                 | 40     | 65                      |
| Abduction (thumb down) | 0-170           |        |                         |
| Right                  |                 | 120    | 150                     |
| Left                   |                 | 125    | 135                     |
| Abd. Internal rotation | 0-70            |        |                         |
| Right                  |                 | 55     | 70                      |
| Left                   |                 | 55     | 75                      |
| Abd. External rotation | 0-90            |        |                         |
| Right                  |                 | 75     | 80                      |
| Left                   |                 | 80     | 75                      |

# Improvement in Occupational Performance

- Able to drink from can
- Able to bite apple
- Increase working tolerance
- No tight feeling over neck and shoulder
- No special attention to dress pullover



# Conclusion

- This single case study finding coherent with previous study that BT have effect in reduce pain and increase AROM
- BT have effect with chronic patient
  - Noted client completed RT in 2005 to 2006, but received BT in 2011
- More well design study to investigate the effectiveness and mechanism of Bowen Therapy

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End

Thank you very much