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鼻咽癌診療原則

[2015年第1版]

提醒您：此份診療原則為本院關於癌症診斷與治療之參考指引。臨床應用上可能會依照個人情況而有所調整。歡迎與您的醫師討論。

與上一版的差異

- 新增WORK-UP (EB virus load)
- 釐清induction chemotherapy在治療中的位階
- 標靶處方，非必要性之治療選項
- 簡化induction及adjuvant chemotherapy之protocol
- 規劃遠處轉移時使用的chemotherapy

Nasopharyngeal Carcinoma

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WORK-UP

- History & PE
- NP biopsy
- Image
 - MRI of H & N
 - Chest X-ray
 - Bone scan
 - Abd. Sono
 - PET (Optional) [Ref. 2,3,4]
- EB virus titer
 - EB-VCA IgG, IgA,EBV viral load
- Hearing evaluation
 - PTA, Tympanogram
- Dental evaluation
 - Panorex, Teeth extraction
- Multidisciplinary consultation

STAGING & TREATMENT

- [T1N0M0]
Definite radiotherapy ^{註1}
- [T1, N1-3, M0] or
- [T2-4, Any N, M0]
詳見 *Page 2*
- [Any T, any N, M1]
Cisplatin-based combination chemotherapy ^{註2}
± **Radiotherapy** ^{註1}

FOLLOW-UP

- [Post-treatment baseline MRI]
 - within 6 months
- [0 - 3 years after treatment]
 - Every 3 months
 - PE, Nasopharyngoscopy
 - Every 1 year
 - H & N MRI, CXR, bone scan & Abd. sono as indicated
- [4-5 years after treatment]
 - Every 4-6 months
 - PE, Nasopharyngoscopy
- [5 years later after treatment]
 - Every 6-12 months
 - PE, Nasopharyngoscopy

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T1, N1-3, M0
T2-4, Any N, M0

CCRT ^{註3} ± Adjuvant chemotherapy ^{註2}

- * High risk for distant failure [Neck node > 6cm, Supraclavicular node (+), Skull base destruction / Intracranial invasion + multiple nodes]
建議加打 Adjuvant chemotherapy.

Neoadjuvant chemotherapy^{註2} + CCRT^{註3}

- * 若只打1 cycle 且與後續CCRT間隔小於 2 weeks，視為CCRT only.

Definitive radiotherapy ^{註1}

- * Neck dissection is indicated when neck residual tumor is noted.

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註1 Principles of Radiotherapy

Definitive Radiotherapy

- Primary and gross adenopathy : 66 - 74 Gy (2.0 Gy/fraction)
- Neck uninvolved nodal stations : 44 - 64 Gy (1.6-2.0 Gy/fractions)

CCRT or RT

- RT alone if : Old age, Impaired renal function, Poor condition

Palliative RT

- Indicated in : Relieve local symptoms, Prevent debilitation such as spinal cord compression and pathological fracture, Achieve durable locoregional control.

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註2 Principles of Chemotherapy

適用於Neoadjuvant 或Adjuvant
每個療程建議打2-3 cycles

Regimen 1: q3-4 weeks (P ± F)

- Cisplatin (20mg/ m²) D1-D5
- Fluorouracil (5-FU) (1000mg/m²) D1-D5

Regimen 2: weekly (P)± q3-4 weeks (F)

- Cisplatin (80-100mg/ m²) D1
- Fluorouracil (5-FU) (1000mg/ m²) D2-D5

Regimen 3: q3-4 weeks (Carboplatin ± F)

- Carboplatin (AUC x 5mg) D1
- Fluorouracil (5-FU) (1000mg/ m²) D1-D4

Regimen 4: Cetuximab weekly + P(or carboplatin) ± F q3-4 weeks (Regimen 1 or Regimen 2)

- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose D1
- Combined Cisplatin (20mg/ m²) D2-D6 + Fluorouracil (5-FU) (1000mg/ m²) D2-D6
- or combined Cisplatin (80-100mg/ m²) D2 + Fluorouracil (5-FU) (1000mg/ m²) D3-D6

Regimen 5: Cetuximab weekly

- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose

Regimen 6: weekly (Cetuximab + P)

- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose D1
 - Combined Cisplatin (30-40mg/ m²) D2

Regimen 7: weekly (Cetuximab)+ q3-4 weeks (P or carboplatin)

- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose D1
 - Combined Cisplatin (80-100mg/ m²) D2

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Regimen 8: TPF q3-4 weeks

- Taxotere (60mg/ m²) D1
- Cisplatin (75mg/ m²) D1
- Fluorouracil (5-FU) (750mg/ m²) D2-D5

Regimen 9: MEP q3 weeks (用於M1)

- Mitomycin-C (8mg/ m²) D1
- Epirubicin (60mg/ m² ivd) D1
- Cisplatin (60mg/ m²) D1

Regimen 10: GGGP q4 weeks (用於M1)

- Gemcitabine (1000mg/ m²) D1, 8, 15
- Cisplatin (60mg/m²) D22

Regimen 11: P-FL (用於M1)

- Cisplatin (60mg/ m²) week 1, 3, 5, 7
- 5-FU (2500mg/ m²) + Leucovorin (250mg/ m²) mixed week 2, 4, 6, 8

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註3 Regimen of CCRT

(Concurrent chemoradiotherapy)

Preferred agent is high dose Cisplatin. (Category 1)

Regimen 1: P q3-4 weeks ± Weekly Cetuximab + RT

- Cisplatin (80-100mg/ m²) q3-4w during R/T 或
- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose D1 + Cisplatin (80-100mg/ m²) q3-4w D2 during R/T

Regimen 2: Weekly P ± Weekly Cetuximab + RT

- Cisplatin (30-40mg/ m²) weekly during R/T 或
- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose D1 + Cisplatin (30-40mg/ m²) weekly D2 during R/T

Regimen 3: Weekly Cetuximab + RT

- Cetuximab (400mg/ m²) loading dose first week, then Cetuximab (250mg/ m²) maintain dose during RT

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註4 特殊用藥健保給付規定

Taxotere

- 頭頸部癌，限局部晚期且無遠端轉移之頭頸部鱗狀細胞癌且無法手術切除者。
- 與Cisplatin 及5-FU 併用，作為放射治療前的引導治療，限使用四個療程。

Cetuximab

- 限與放射線療法合併使用於局部晚期之口咽癌、下咽癌及喉癌患者，且符合下列條件之一：
 1. 年齡 \geq 70 歲
 2. Cr < 50ml/min
 3. 聽力障礙者 (聽力障礙定義為500Hz、1000Hz、2000Hz 平均聽力損失大於25 分貝)
 4. 無法耐受platinum-based 化學治療。
- 使用總療程以接受8 次輸注為上限。
- 需經事前審查核准後使用。

Carboplatin

- 限腎功能不佳(CCr < 60) 或
- 曾作單側或以上腎切除之惡性腫瘤患者使用。

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Reference:

1. NCCN Clinical Practice Guidelines in Oncology – Head and Neck Cancers Version 2. 2013
2. Lee SW, Nam SY, Im KC, et al. Prediction of prognosis using standardized uptake value of 2-[(18)F] fluoro-2-deoxy- d-glucose positron emission tomography for nasopharyngeal carcinomas. *Radiother Oncol* 2008;87:211–216.
3. Chan SC, Chang JT, Wang HM, et al. Prediction for distant failure in patients with stage M0 nasopharyngeal carcinoma: The role of standardized uptake value. *Oral Oncol* 2009;45: 52–58.
4. Wen-Shan Liu, Ming-Fang Wu, Hsien-Chun Tseng, Jung-Tung Liu, Jui-Hung Weng, Yueh-Chun Lee, Jong-Kang Lee. The role of pre-treatment FDG PET in nasopharyngeal carcinoma treated with intensity-modulated radiotherapy. *Int. J. Radiat. Oncol. Biol. Phys.* 2012 82(2): 561-566.
5. Chua DT, Ma J, Sham JS et al (2005): Long-term survival after cisplatin-based chemotherapy and radiotherapy for nasopharyngeal carcinoma: a pooled data analysis of two phase III trials. *J Clin Oncol* 23: 1118-1124.
6. Al-Amro A, Al-Rajhi N, Khafaga Y et al. (2005): Neoadjuvant chemotherapy followed by concurrent chemo-radiation therapy in locally advanced nasopharyngeal carcinoma. *Int J Radiat Oncol Biol Phys* 62: 508-513
7. Chan AT, Ma BB, Lo YM et al. (2004): Phase II study of neoadjuvant carboplatin and paclitaxel followed by radiotherapy and concurrent cisplatin in patients with locoregionally advanced nasopharyngeal carcinoma: therapeutic monitoring with plasma Epstein-Barr virus DNA. *J Clin Oncol* 22:3053-3060
8. Johnson FM, Garden AS, Oakner HK et al, (2005): A phase I/II study of neoadjuvant chemotherapy followed by radiation with boost chemotherapy for advanced T-stage nasopharyngeal carcinoma. *Int J Radiat Oncol Biol Phys* 63: 717-724
9. Chan AT, Leung SF, Ngan RK et al. (2005): Overall survival after concurrent cisplatin-radiotherapy compared with radiotherapy alone in locoregionally advanced nasopharyngeal carcinoma. *J Natl Cancer Inst* 97:536-539
10. Hong RL, Ting LL, Ko JY, et al. Induction Chemotherapy With Mitomycin, Epirubicin, Cisplatin, Fluorouracil, and Leucovorin Followed by Radiotherapy in the Treatment of Locoregionally Advanced Nasopharyngeal Carcinoma. *J Clin Oncol* 19:4305-4313, 2001
11. Ma BB, Tannock IF, Pond GR, et al. Chemotherapy with gemcitabine-containing regimens for locally recurrent or metastatic nasopharyngeal carcinoma. *Cancer*. 2002; 95: 2516–2523.
12. Lin JC, Jan JS, Chen KY, et al. Outpatient weekly 24-hour infusional adjuvant chemotherapy of cisplatin, 5-fluorouracil, and leucovorin for high-risk nasopharyngeal carcinoma. *Head Neck* 2003;25:438–450.