高雄榮民總醫院
鼻咽癌診療原則

［ 2016年第1版 ］

頭頸癌治療團隊制訂

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

- 化療藥物Regimen及給予方式單純化
- 強調surgery在early residual disease狀態的角色

- 釐清Induction CT的使用時機

Carcinoma of Nasopharynx

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WORK-UP

- History & PE
- Biopsy & Pathology
- Image

→ MRI and/or CT of H & N

→ Chest X-ray

→ Bone scan

→ Abd. Sono

→ ± PET scan

- EBV status: viral load, ± EB-EA/NA, ± EB-VCA IgG/IgA
- Dental evaluation

→ Panorex ± teeth extraction

- Hearing evaluation

→ PTA, tympanogram

- Multidisciplinary consultation

STAGING & TREATMENT

- [T1, N0, M0]

Definitive RT

- [T1, N1-3, M0] or [T2-4, any N, M0]

詳見 *Page 2*

- [Any T, any N, M1]

詳見 *Page 3*

FOLLOW-UP

- [Post-Tx 3-6 months]

→ Baseline MRI and/or CT

- [0-3 years after Tx]

→ Every 2-3 months: PE, nasopharyngoscopy

→ Every 6-12 months: viral load, ± EB-EA/NA, ± EB-VCA IgG/IgA; MRI ± CT, CxR, bone scan & Abd. Sono as indicated

- [4-5 years after Tx]

→ Every 4-6 months: PE, nasopharyngoscopy

- [5 years later after Tx]

→ Every 6-12 months: PE, nasopharyngoscopy

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Clinical T1, N1-3 or T2-4, any N, M0

Primary treatment	Response and salvage treatment	
CCRT ± Adjuvant CT 註1-3 High risk for distant failure (clinical cT4 or cN3) 建議加打 2-3 courses of adjuvant CT。	Complete clinical response	Follow-up
Induction CT + CCRT or RT 註1-3 2 courses for locally advanced cT4；若只打1 cycle 且與後續CCRT間隔小於 2 weeks，視為CCRT only。	Residual disease or clinically suspicious residue	Surgery if operable＊ ＃ Adjuvant CT 註3
Definitive RT 註1 Poor medical condition or patient's preference。		

＃Salvage neck dissection is indicated if residual neck disease.

＊Salvage nasopharyngectomy is indicated for operable residual primary tumor.

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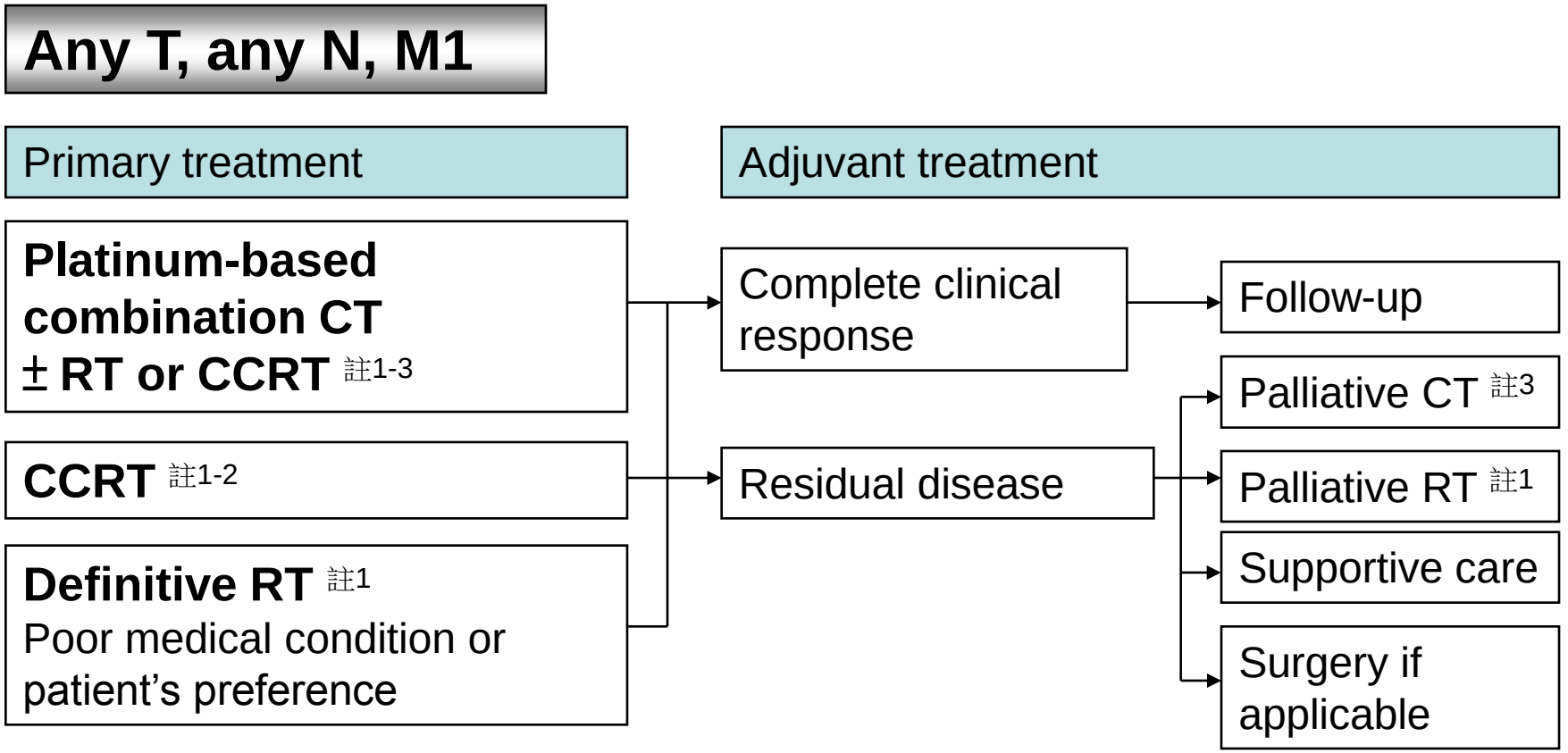

Carcinoma of Nasopharynx

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.

Carcinoma of Nasopharynx

註2

Principles of Chemotherapy

Concurrent with RT

Regimen 1: q3w CDDP ± Cetuximab + RT 註4

•Cisplatin (80-100mg/ m2) q3w during R/T

•Cetuximab(400mg/ m2) loading dose first week, then Cetuximab(250mg/ m2) maintain dose D1 + Cisplatin (80-100mg/ m2) q3w D2 during R/T

Regimen 2: Weekly CDDP ± Cetuximab + RT 註4

•Cisplatin (30-40mg/ m2) weekly during R/T

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

Regimen 3: q3w Carboplatin ± Cetuximab + RT 註4

•Carboplatin (AUC x 5mg) q3w during R/T

•Cetuximab(400mg/ m2) loading dose first week, then Cetuximab(250mg/ m2) maintain dose D1 + Cisplatin (80-100mg/ m2) q3w D2 during R/T

Regimen 4: Weekly Cetuximab + RT 註4

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

Carcinoma of Nasopharynx

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Regimens of Chemotherapy

Induction, salvage or adjuvant, *建議2-3cycles*

Regimen 1: q3-4 weeks CDDP ± F ± weekly Cetuximab 註4

- Cisplatin (20mg/ m2) D1-D5
- Fluorouracil (5-FU) (1000mg/m2) D1-D5
- Cetuximab(400mg/ m2) loading dose first week, then weekly Cetuximab (250mg/ m2)

Regimen 2: q3-4 weeks CDDP ± F ± weekly Cetuximab 註4

- Cisplatin(80-100mg/ m2) D1
- Fluorouracil (5-FU) (1000mg/ m2) D2-D5
- Cetuximab(400mg/ m2) loading dose first week, then weekly Cetuximab (250mg/ m2)

Regimen 3: q3-4 weeks Carboplatin ± F ± weekly Cetuximab 註4

- Carboplatin (AUC x 5mg) D1
- Fluorouracil (5-FU) (1000mg/ m2) D2-D5
- Cetuximab(400mg/ m2) loading dose first week, then weekly Cetuximab (250mg/ m2)

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Regimens of Chemotherapy

Induction, salvage or adjuvant, *建議2-3cycles*

Regimen 4: q3-4 weeks T + P ± F ± weekly Cetuximab
- Taxotere(60 mg/ m2) D1 註4
- Cisplatin(60-75 mg/ m2) D1
- Fluorouracil (5-FU)(600-750mg/m2) D2-D5
- Cetuximab (400mg/ m2) loading dose first week, then Cetuximab (250mg/ m2) maintain dose

Regimen 5: weekly Cetuximab 註4
- Cetuximab (400mg/ m2) loading dose first week, then Cetuximab (250mg/ m2) maintain dose

Regimen 6: oral Fluorouracil
- Ufur cap (tegafur 100mg+uracil 224mg) 2# TID

(Salvage or palliative CT中作為取代iv-formed 5-FU之替代藥物)

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Regimens of Chemotherapy

Induction, salvage or adjuvant, *建議2-3cycles*

Regimen 7: q4w GGGP

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

Regimen 8: P-FL

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

Carcinoma of Nasopharynx

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 ≧ 70 歲
2.Ccr ＜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。

References

1.NCCN Clinical Practice Guidelines in Oncology – Head and Neck Cancers Version 1. 2015

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 ananlysis of two phase III trialsl 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 Asm Oakner HK et ak, (2005): A phase I/II study of enoadjuvant chemotherapy followed by radiation with boost chemotherapy for advance 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.