高雄榮民總醫院

膀胱癌診療原則

v.1.2015

膀胱癌醫療團隊擬定

2015年09月15日修訂

注意事項：這個診療準則主要作為醫師和其他保健專家診療癌症病人參考之用。
假如你是一個癌症病人,直接引用這個研究資訊及診療準則並不恰當。
只有你的醫師才能決定給你最恰當的治療。

2015 VGHKS Guideline for Management of Bladder Cancer

此版新增抗癌藥物停藥準則：

1.疾病惡化

2.無法負荷副作用

膀胱癌(圖一)

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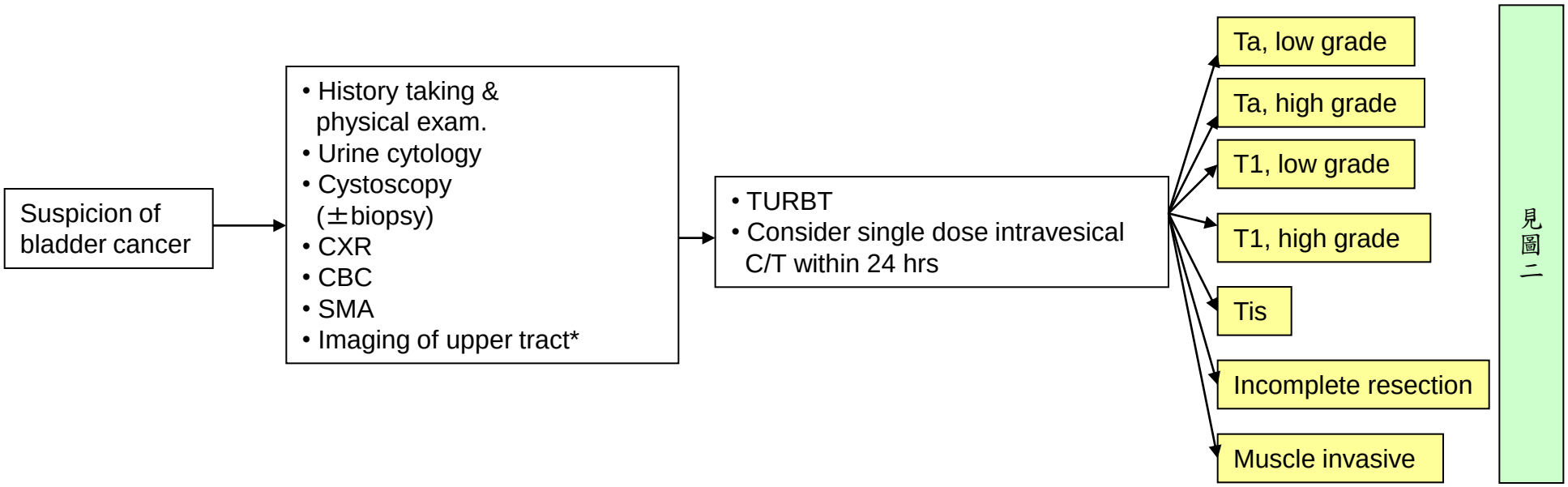
臨床診療指引　2015年第二版

臨床表徵	初期評估	診斷、治療	分期



* Imaging of upper tract may include IVP, ultrasonography, CT urography or MR urography.

膀胱癌(圖二)

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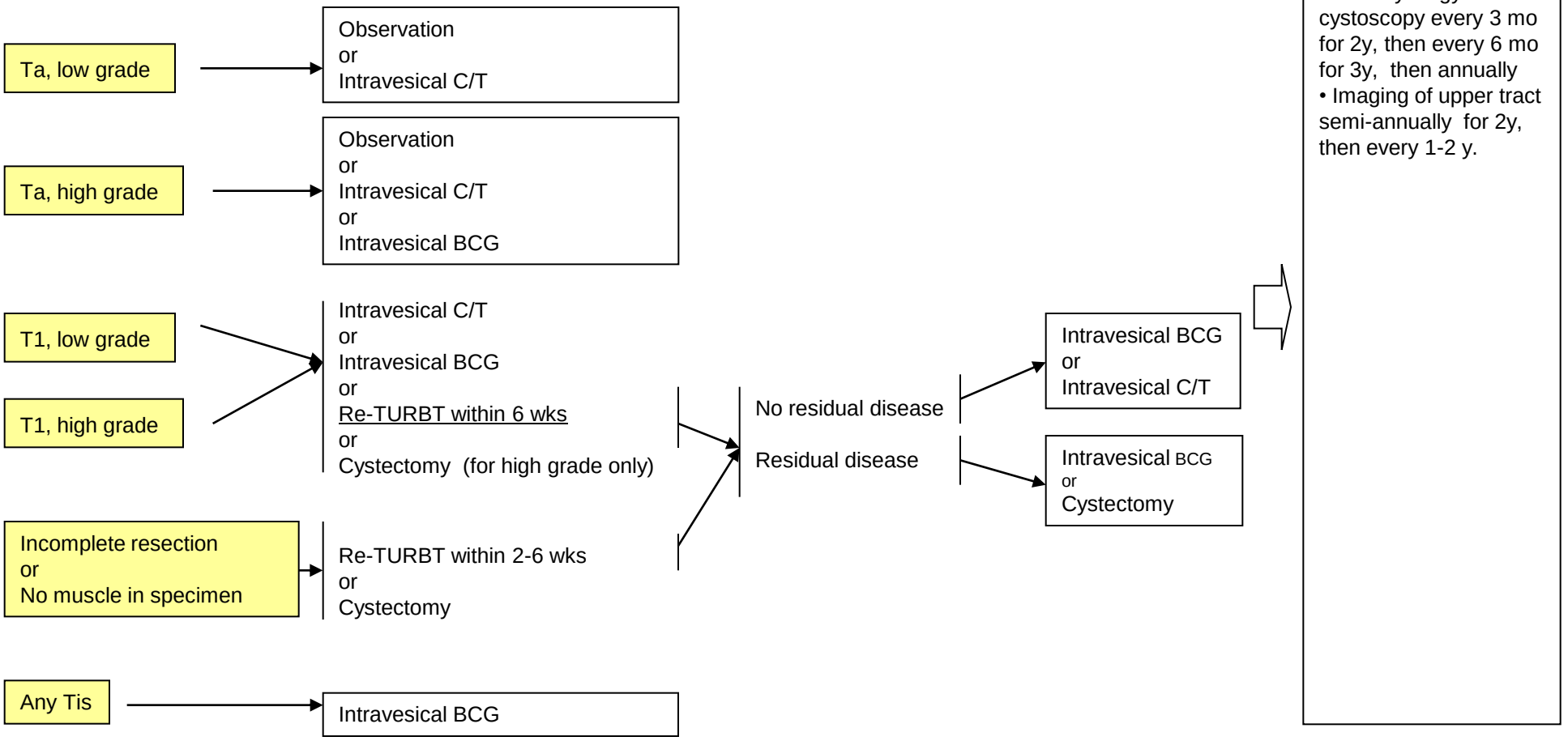
分期	輔助治療	追蹤



膀胱癌(圖三)

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分期	深入評估	治療	輔助治療

T2
T3

- Nutriton & Performance status evaluation
- Abdominal CT or MRI
- Bone scan if alkaline phosphatase elevate or symptoms

Negative nodes

Radical cystectomy and neoadjuvant cisplatin-based combination neoadjuvant Chemotherapy → Consider adjuvant chemotherapy based on pathologic risk (pT3-4, positive nodes) if no neoadjuvant treatment given

partial cystectomy (highly selected patients with solitary lesion in a suitable location; no Tis) and consider neoadjuvant cisplatin-based combination chemotherapy → Consider adjuvant RT or chemotherapy based on pathologic risk (pT3-4, positive nodes, positive margin. high -grade)

Selective bladder sparing following maximal TURBT with concurrent chemotherapy+ RT (only for patients without hydronephrosis)

For patients with extensive comorbid disease or poor performance status: TURBT alone or RT alone or Chemotherapy alone

→ Evaluate after 40-50 Gy, at completion of RT, or at 3 mo with:
- Cystoscopy, prior tumor site rebiopsy or TURBT, cytology, and imaging of abdomen/pelvis

No tumor → Observation or Completion of RT up to 65 Gy Consider adjuvant chemotherapy

tumor:
- Resectable → Cystectomy
- Unresectable for not a surgical candidate → Consider alternative chemotherapy

Positive nodes → 見圖四

膀胱癌(圖四)

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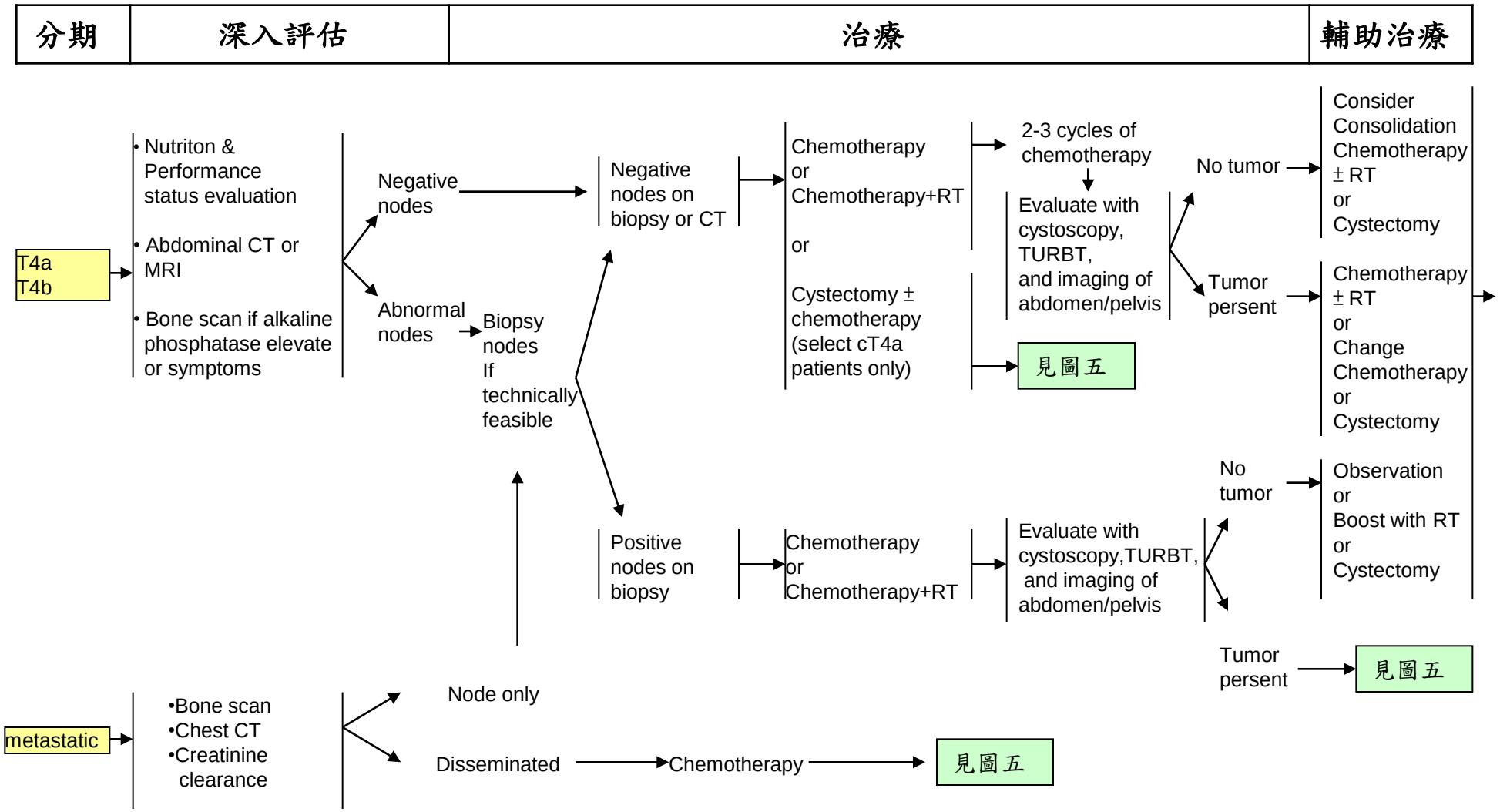

膀胱癌(圖五)

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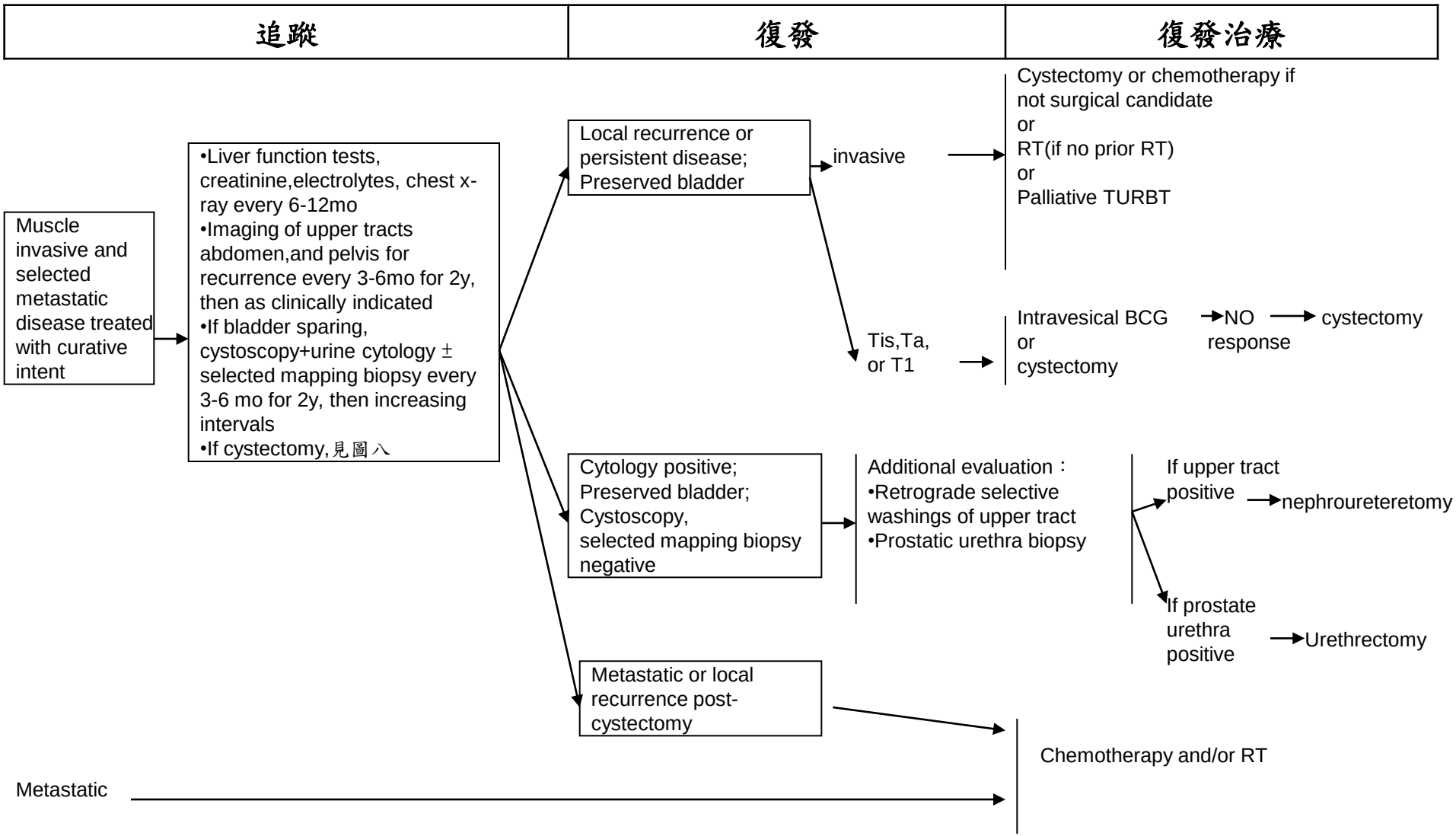

Principle of surgical management

TURBT: Papillarv

- Adequate resection with muscle If papillary high-grade lesion
- Re-resection If incomplete initial resection, no muscle in specimen or large lesion

TURBT: Tis

- Multiple random biopsies
- Biopsy adjacent to tumor
- Prostate urethral biopsies

TURBT: invasive

- Repeat re-resection:
  - If no muscle in biopsy
  - Small fragment of T2 insufficient to attribute risk
- Repeat TURBT should be considered if first TURBT does not allow adequate staging or attribution of risk factor for treatment selection or when using bladder-preserving treatment by chemotherapy and/or RT

PARTIAL CYSTECTOMY

- Solitary lesion in location amenable to segmental resection with adequate margin, no Tis
- Pelvic lymphadenectomy should be performed in conjunction with the segmental cystectomy

RADICAL CYSTECTOMY

- Radical cystectomy should include bilateral node dissection at a minimum including common, internal and external iliac nodes, and obturator nodes

膀胱癌(圖七)

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Non-Urothelial carcinoma of urinary bladder

Same as Urothelial cell carcinoma management with the following Issues:

Mixed Histology

•Urothelial carcinoma plus pure squamous, glandular adenocarcinoma, micropapillary, nested, plasmacytoid, sarcomatoid should be identified because of the potential to have a more aggressive natural history.

•Follow Urothelial Carcinoma of the Bladder guidelines with complete response less likely if bladder sparing considered

Pure Squamous:

•Cystectomy, RT,or other agents commonly used with squamous cell carcinoma of other sites such as 5-FU, taxanes, methotrexate, etc.

Adenocarcinoma

•Radical cystectomy or partial cystectomy

•Conventional chemotherapy (eg, MVAC) for urothelial carcinoma is not effective, however, the use of chemotherapy or RT should be individualized and maybe of potential benefit in select patients.

•Consider alternative therapy or clinical trial

Any Small-cell component:

•Neoadjuvant or adjuvant chemotherapy using small-cell regimens and local treatment (cystectomy or radiotherapy)

•Primary chemotherapy regimens similar to small cell lung cancer. see small cell lung cancer Guidelines

Urachal Carcinoma:

•Requires complete urachal resection

•Conventional chemotherapy for urothelial carcinoma Is not effective, however, the use of chemotherapy or RT should be individualized and maybe of potential benefit in select patients.

Primary Bladder Sarcoma

•See Soft Tissue Sarcoma Guidelines

Follow-up after cystectomy

After a radical cystectomy

- Urine cytology, creatinine, electrolytes, every 3 to 6 months for 2 years and then as clinically indicated
- Imaging of the chest, abdomen, and pelvis every 3 to 12 months for 2 years based on risk of recurrence and then as clinically indicated
- Urethral wash cytology, every 6 to 12 month； particularly if Tis was found within the bladder or prostatic urethra
- if a continent diversion was created, monitor for vitamin B12 deficiency annually

After a partial cystectomy

- Same follow-up as above, in addition to the following:
  - Serial cytologic examinations and cystoscopies at 3-month intervals to monitor for relapse in the bladder

Principle of intravesical treatment

Intravesical chemotherapy:

Initiated within 24 hours after resection
Regimen: epirubicin 50mg or mitomycin-C 30mg in 50cc normal saline
Induction therapy: initiated 2 weeks after resection, weekly for 6 weeks
Maintenance therapy: role uncertain

Intravesical BCG therapy:

- Induction therapy:
  Initiated 2-4 weeks after resection
  Once weekly for 6 weeks
  Regimen: 81 mg BCG in 50cc normal saline

- Maintenance therapy
  81 mg BCG intravesical instillation once weekly for 1-3weeks at 3^{rd}, 6^{th} , 12^{th}, 18^{th}, 24^{th} month
  Regimen: 81 mg BCG in 50cc normal saline

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＊Perioperative chemotherapy（Neoadjuvant or Adiuvant）
Regimens ：

Regimen	Dosage	
Dose-Dense MVEC	Methotrexate	30MG/M2 on D1 or D2 of a 14 day cycle
	vinblastine	3MG/M2 on D1 or D2
	Epirubicin	45MG/M2 on D1 or D2
	Cisplatin	70MG/M2 on D1　References:NO2
MVEC	Methotrexate	30MG/M2 on D1,15,22
	vinblastine	3MG/M2 on D2,15.22
	Epirubicin	45MG/M2 on D2　References:NO3
	Cisplatin/Carbopatin	70MG/M2 on D2/AUCx4~6MG
Gemcitabine/Cisplatin	Gemcitabine	1000MG/M2 on D1,8,15 of a 28 day cycle
	Cisplatin/Carbopatin	70MG/M2 on D2/AUCx4~6MG　References:NO4

註：1.CCr ＜60使用Carbopatin　2.This dose should not combined with radiation

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＊First-line chemotherapy for metastativc disease
Regimens ：

Regimen	Dosage	
Dose-Dense MVEC	Methotrexate	30MG/M2 on D1 or D2 of a 14 day cycle
	vinblastine	3MG/M2 on D1 or D2
	Epirubicin	45MG/M2 on D1 or D2
	Cisplatin	70MG/M2 on D1　References:NO2
MVEC	Methotrexate	30MG/M2 on D1,15,22
	vinblastine	3MG/M2 on D2,15.22
	Epirubicin	45MG/M2 on D2　References:NO3
	Cisplatin/Carbopatin	70MG/M2 on D2/AUCx4~6MG
Gemcitabine/Cisplatin	Gemcitabine	1000MG/M2 on D1,8,15 of a 28 day cycle
	Cisplatin/Carbopatin	70MG/M2 on D2/AUCx4~6MG　References:NO4

註：1.CCr ＜60使用Carbopatin　2.This dose should not combined with radiation

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Principles of chemotherapy management

ΔDose-Dense MVEC regimen with growth factor support for 3 or 4 cycles

ΔMVEC regimen regimen for 6 cycles

Δ Gemcitabine/Cisplatin regimen for 6 cycles

＊CCRT　Regimens：

Regimen	Dosage	
Cisplatin alone	Cisplatin	35MG/M2 weekly　References:NO3

Reference

1. NCCN Clinical Practice Guideline in Oncology for Bladder Cancer ,Version 2,2013
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3. Sternberg CN, de Mulder PH, Schornagel JH, et al. Randomized phase lll trial of high-dose-intensity methotrexate, vinblastine, doxorubicin, and cisplatin(MVAC) chemotherapy and recombinant human granulocyte colony-stimulating factor versus classic MVAC in advanced urothelial tract tumors: European Organization for Research and Treatment of Cancer Protocol no. 30924. J Ciln Oncil 2001;19:2638-2646.
4. Dash A, Pettus JA, Herr HW, et al. A role for neoadjuvant gemcitabine plus cisplatin in muscle-invasive urothelial carcinoma of the bladder: a retrospective experience. Cancer 2008;113:2471-2477.
5. Campbell-Walsh Urology, 9th edition, 2007
6. European Association of Urology Guideline, 2011