

高雄榮民總醫院 子宮惡性肉瘤診療指引

2020年08月25日第一版

婦癌醫療團隊擬訂

注意事項：這個診療原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，直接引用這個診療原則並不恰當，只有你的醫師才能決定給你最恰當的治療。

修訂指引

- 本共識依下列參考資料修改版本
 - NCCN Clinical Practical Guidelines in Oncology™ Uterine Sarcoma Cancer (Version 2.2020 — July 24, 2020)
 - 婦癌研究委員會，子宮惡性肉瘤癌篩檢臨床指引（2011）：國家衛生研究院
 - 其他相關子宮惡性肉瘤臨床指引

會議討論

上次會議：2019/08/29

本共識與上一版的差異

上一版	新版
<ol style="list-style-type: none">1. 原流程圖一、二、三在不適宜初次手術及IVB的治療選項為全身系統性治療±緩解放射治療，無緩和性治療選項。(p. 10. 11. 12)2. 原流程圖二的低度子宮內膜基質惡性肉瘤中分期II. III. IV的治療選項為雌激素抑制劑±針對腫瘤直接放射治療。(p. 11)3. 原荷爾蒙治療的藥物選項裡只有Letrozole的藥物選擇。(p. 15)4. 放射線治療的準則中，EBRT部分無術後有肉眼可見的殘餘腫瘤後的放療建議。(p. 16)	<ol style="list-style-type: none">1. 修改流程圖一、二、三在不適宜初次手術及IVB的治療選項加上可考慮緩和性治療(身體不適合治療者)。(p. 10. 11. 12)2. 修改流程圖二的低度子宮內膜基質惡性肉瘤中分期II. III. IV的治療選項為兩側輸卵管、卵巢切除術±雌激素抑制劑±針對腫瘤直接放射治療。(p. 11)3. 荷爾蒙治療的藥物選項裡增加Megestrol及Medroxyprogesterone acetate (Farlutal)的藥物選擇。(p. 15)4. 放射線治療的準則中，EBRT部分增加術後有肉眼可見的殘餘腫瘤後的放療建議。(p. 16)

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分期AJCC 8th

Corpus Uteri – Carcinoma and Carcinosarcoma

Primary Tumor (T)		
T	FIGO	T Criteria
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor confined to the corpus uteri, including endocervical glandular involvement
T1a	IA	Tumor limited to the endometrium or invading less than half the myometrium
T1b	IB	Tumor invading one half or more of the myometrium
T2	II	Tumor invading the stromal connective tissue of the cervix but not extending beyond the uterus. Does NOT include endocervical glandular involvement.
T3	III	Tumor involving serosa, adnexa, vagina, or parametrium
T3a	IIIA	Tumor involving the serosa and/or adnexa (direct extension or metastasis)
T3b	IIIB	Vaginal involvement (direct extension or metastasis) or parametrial involvement
T4	IVA	Tumor invading the bladder mucosa and/or bowel mucosa (bullous edema is not sufficient to classify a tumor as T4)

Regional Lymph Node (N)		
N	FIGO	N Criteria
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0 (i+)		Isolated tumor cells in regional lymph node(s) no greater than 0.2 mm
N1	IIIC1	Regional lymph nodes metastasis to pelvic lymph nodes
N1mi	IIIC1	Regional lymph node metastasis (greater than 0.2 mm but not greater than 2.0 mm in diameter) to pelvic lymph nodes
N1a	IIIC1	Regional lymph node metastasis (greater than 2.0 mm in diameter) to pelvic lymph nodes
N2	IIIC2	Regional lymph node metastasis to para-aortic lymph nodes, with or without positive pelvic lymph nodes
N2mi	IIIC2	Regional lymph node metastasis (greater than 0.2 mm but not greater than 2.0 mm in diameter) to para-aortic lymph nodes, with or without positive pelvic lymph nodes
N2a	IIIC2	Regional lymph node metastasis (greater than 2.0 mm in diameter) to para-aortic lymph nodes, with or without positive pelvic lymph nodes

分期AJCC 8th

Corpus Uteri – Carcinoma and Carcinosarcoma

Distant Metastasis (M)		
M	FIGO	M Criteria
M0		No distant metastasis
M1	IVB	Distant metastasis (includes metastasis to inguinal lymph nodes, intraperitoneal disease, lung, liver, or bone). (It excludes metastasis to pelvic or para-aortic lymph nodes, vagina, uterine serosa, or adnexa).

STAGE GROUPS			
T	N	M	stage
T1	N0	M0	I
T1a	N0	M0	IA
T1b	N0	M0	IIB
T2	N0	M0	II
T3	N0	M0	III
T3a	N0	M0	IIIA
T3b	N0	M0	IIIB
T1-T3	N1/N1mi/N1a	M0	IIIC1
T1-T3	N2/N2mi/N2a	M0	IIIC2
T4	Any N	M0	IVA
Any T	Any N	M1	IVB

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Corpus Uteri – Sarcoma

Leiomyosarcoma and Endometrial Stromal Sarcoma		
Primary Tumor (T)		
T	FIGO	T Criteria
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to the uterus
T1a	IA	Tumor 5 cm or less in greatest dimension
T1b	IB	Tumor more than 5 cm
T2	II	Tumor extends beyond the uterus, within the pelvis
T2a	IIA	Tumor involves adnexa
T2b	IIB	Tumor involves other pelvic tissues
T3	III	Tumor infiltrates abdominal tissues
T3a	IIIA	One site
T3b	IIIB	More than one site
T4	IVA	Tumor invades bladder or rectum
Adenosarcoma		
Primary Tumor (T)		
T	FIGO	T Criteria
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to the uterus
T1a	IA	Tumor limited to the endometrium/endocervix
T1b	IB	Tumor invades to less than half of the myometrium
T1c	IC	Tumor invades more than half of the myometrium
T2	II	Tumor extends beyond the uterus, within the pelvis
T2a	IIA	Tumor involves adnexa
T2b	IIB	Tumor involves other pelvic tissues
T3	III	Tumor infiltrates abdominal tissues
T3a	IIIA	One site
T3b	IIIB	More than one site
T4	IVA	Tumor invades bladder or rectum
Regional Lymph Node (N)		
All Uterine Sarcomas		
N	FIGO	N Criteria
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0 (i+)		Isolated tumor cells in regional lymph node(s) node(s) no greater than 0.2 mm
N1	IIIC	Regional lymph nodes metastasis

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Corpus Uteri – Sarcoma

Distant Metastasis (M)		
All Uterine Sarcomas		
M	FIGO	M Criteria
M0		No distant metastasis
M1	IVB	Distant metastasis (excluding adnexa, pelvic, and abdominal tissues)

Leiomyosarcoma and Endometrial Stromal Sarcoma			
STAGE GROUPS			
T	N	M	stage
T1	N0	M0	I
T1a	N0	M0	IA
T1b	N0	M0	IB
T1c	N0	M0	IC
T2	N0	M0	II
T3a	N0	M0	IIIA
T3b	N0	M0	IIIB
T1-3	N1	M0	IIIC
T4	Any N	M0	IVA
Any-T	Any N	M1	IVB

Adenosarcoma			
STAGE GROUPS			
T	N	M	stage
T1	N0	M0	I
T1a	N0	M0	IA
T1b	N0	M0	IB
T2	N0	M0	II
T3a	N0	M0	IIIA
T3b	N0	M0	IIIB
T1-3	N1	M0	IIIC
T4	Any N	M0	IVA
Any-T	Any N	M1	IVB

子宮惡性肉瘤分類

UTERINE SARCOMA CLASSIFICATION¹

- Low-grade endometrial stromal sarcoma (ESS)²
- High-grade ESS³
- Undifferentiated uterine sarcoma (UUS)⁴
- Uterine leiomyosarcoma (uLMS)⁵

Other Rare Uterine Mesenchymal Sarcoma Subtypes:
(see the [NCCN Guidelines for Soft Tissue Sarcoma](#))

- Adenosarcomas
- PEComas
- Rhabdomyosarcoma

子宮惡性肉瘤診療指引相關之主要檢查

1. 病史
2. 理學檢查及一般婦科基本檢查: 內診/抹片/婦科超音波
3. 子宮鏡檢查、子宮內膜及子宮內頸切片檢查(報告)*
4. CXR[@], ECG
5. CBC/DC, SMA
6. Pelvic/Abdominal MRI[@] or CT[@], Chest CT scan, Tumor markers ** :
LDH, Ca-125, Ca-199, CEA.
7. PET-CT**
8. Bone scan ***
9. Pelvic CT scan, Chest CT scan, Brain CT/MRI***

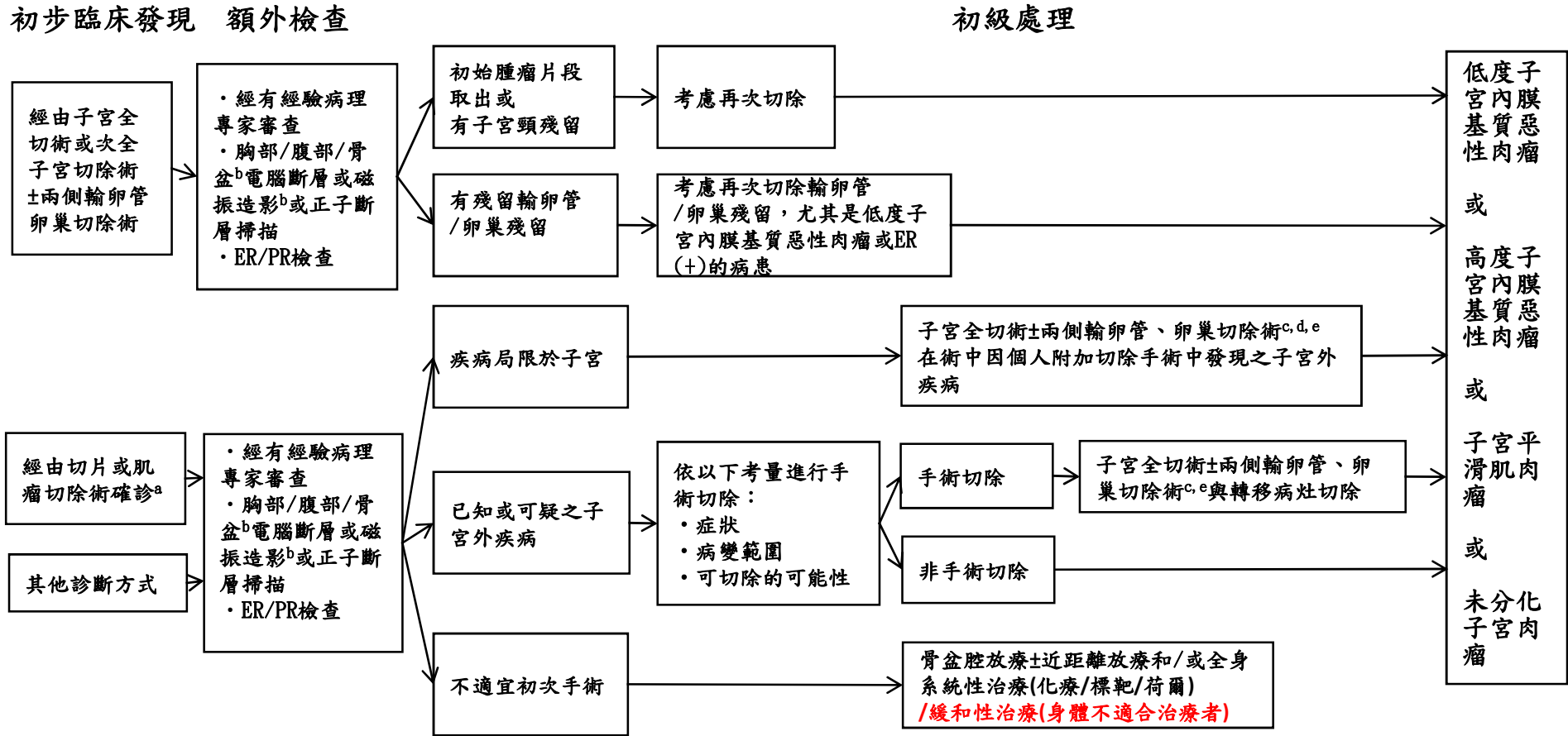
*當手術後意外發現(診斷)時無需檢查或外院病理複閱

**可做為首次/追蹤/複發檢查

***做為追蹤/複發檢查

@與期別相關之主要檢查的必要項目

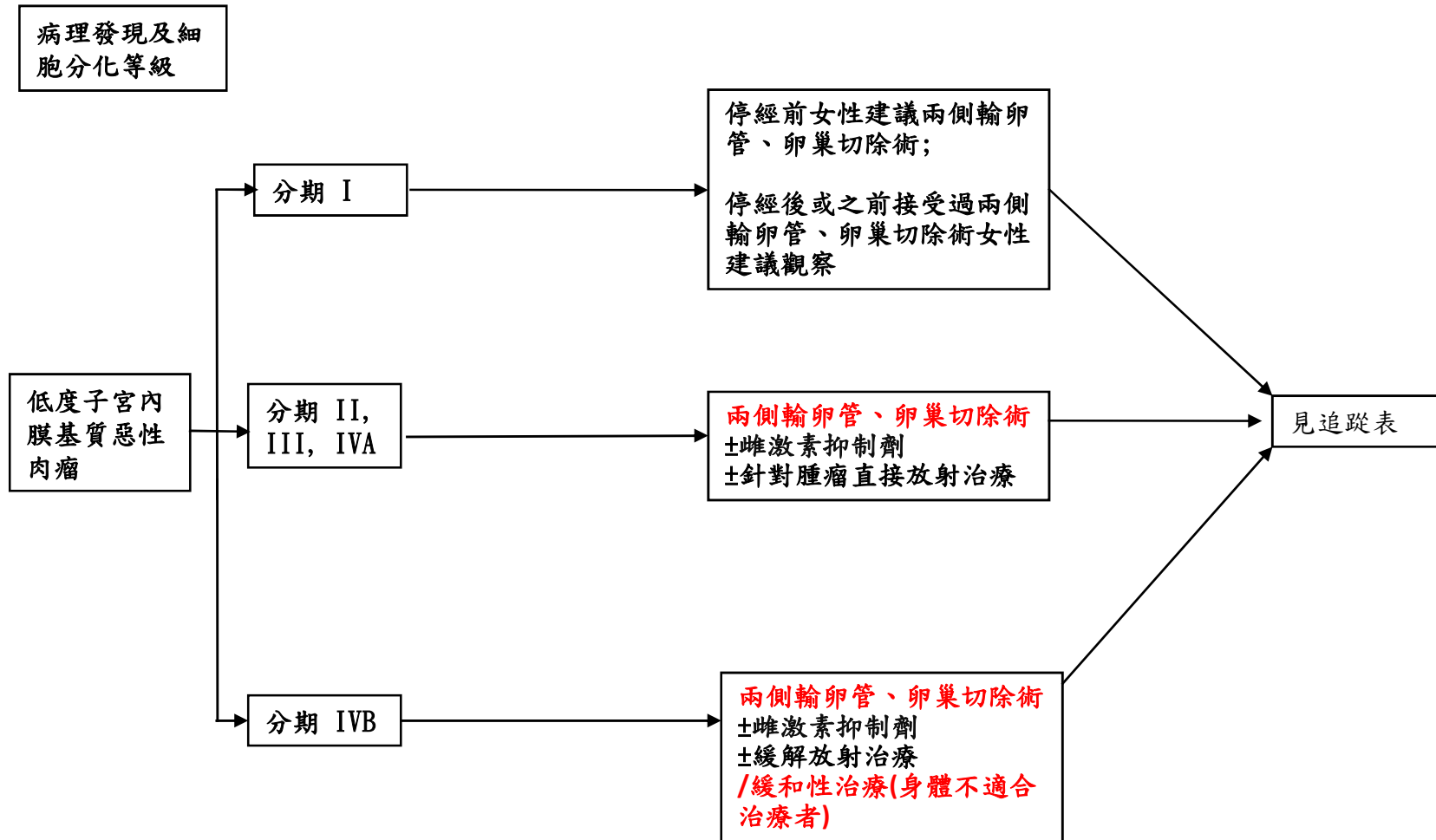
高雄榮總婦癌團隊子宮惡性肉瘤臨床診療指引



- a. 術前影像學和切片可能有助於確定子宮肉瘤，雖然切片靈敏度小於子宮內膜癌。如果有基質惡性肉瘤的嫌疑，腫瘤片段取出應該避免。
- b. 除非有禁忌，電腦斷層或磁共振造影的對比要遵循準則。
- c. 卵巢摘除會因病人是否為已進入更年期而考慮。但如果ER/PR positive則建議BSO。
- d. 對於經TH/BSO或切片標本後發現子宮肉瘤：建議依個人狀態進行影像及額外的手術切除
- e. 子宮惡性肉瘤應該整塊移除以獲取最佳結果；取出時應避免分碎組織

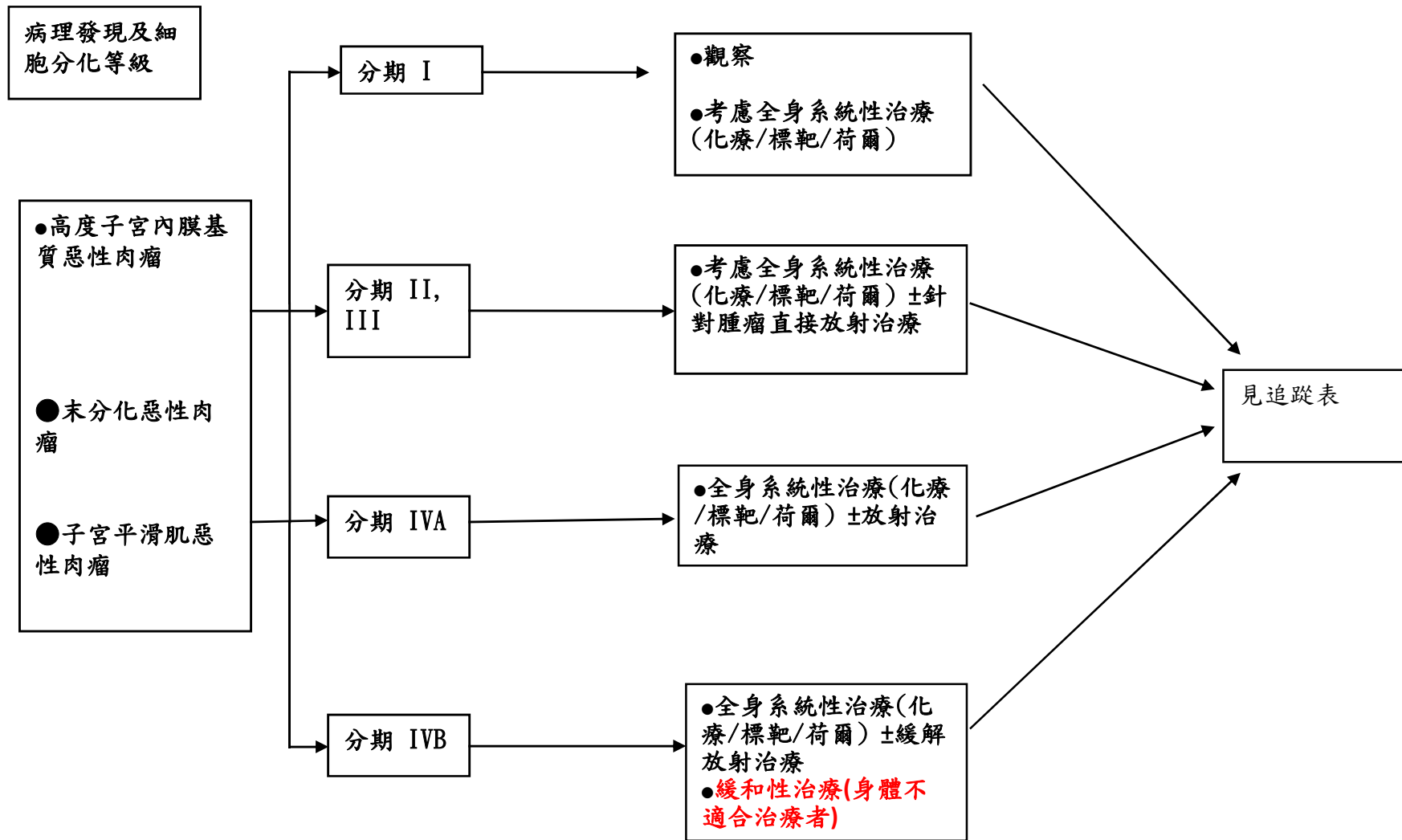
流程圖一

高雄榮總婦癌團隊子宮惡性肉瘤臨床治療指引



流程圖二

高雄榮總婦癌團隊子宮惡性肉瘤臨床診療指引



流程圖三

高雄榮總婦癌團隊子宮惡性肉瘤臨床診療指引

追蹤表

- 前二-三年，每三-四個月，之後每6-12個月身體檢查
- 術後第1-3年，因病情需要每3-6個月，可使用電腦斷層檢查胸/腹/骨盆腔部位，第4-5年，因病情需要每6月行電腦斷層檢查，第6年以後每一年行上述電腦斷層檢查
- 因病情或臨床上有轉移之可能使用核磁共振或正子檢查
- 給予病人病情詳細衛教及說明

局部復發
 ●陰道/骨盆腔
 ●胸部x光正常及電腦斷層腹部及骨盆腔檢查，僅局部陰道/骨盆腔復發

治療見復發表

考慮外科手術切除或其他局部熱頻燒灼治療(RFA: Radiofrequency Ablation): 考慮術後全身系統性治療(化療/標靶/荷爾蒙)蒙此僅對子宮內膜基質惡性肉瘤) 或 術後放射線治療

僅單獨一處轉移

可切除

*全身系統性治療(化療/標靶/荷爾蒙)±緩和放射線治療(之後若可切除病灶，可考慮手術) 或其他局部熱頻燒灼治療(RFA: Radiofrequency Ablation) 或 緩解放射線治療 若有好的效果可考慮手術

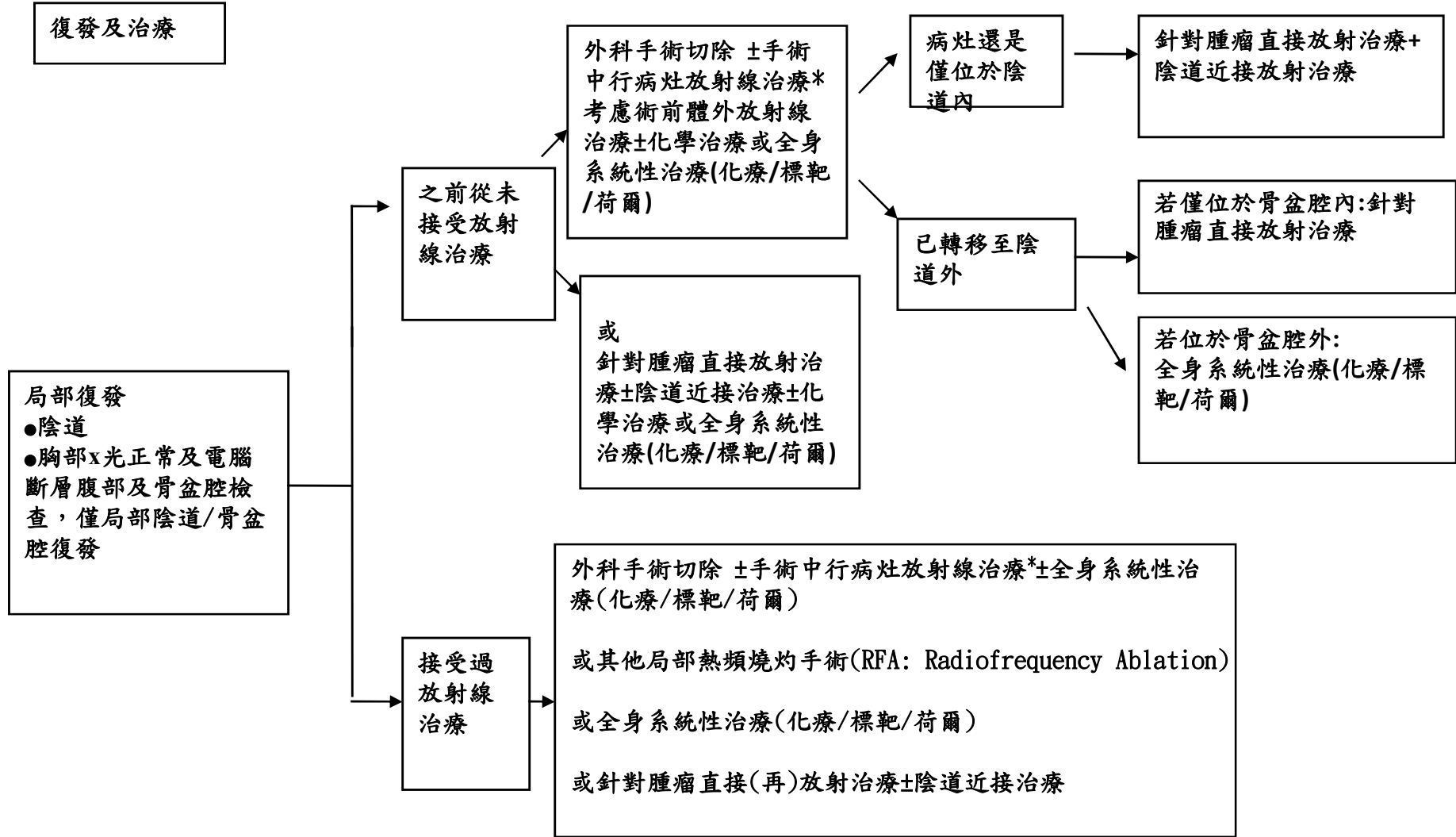
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多處轉移

全身系統性治療(化療/標靶/荷爾蒙)±緩解放射線治療或最好支持療法

流程圖四

高雄榮總婦癌團隊子宮惡性肉瘤臨床診療指引



*手術中行病灶放射線治療(IORT)目前在本科未有此項服務。

流程圖五

高雄榮總婦癌團隊子宮惡性肉瘤臨床診療指引

Adjuvant /or Salvage 化學治療(輔助或轉移)		
protocol	劑量	時程
Dacarbazine(DTIC), Epirubicin, Platinum, Ifosfamide	Dacarbazine 200mg QD x 5 days Epirubicin 50mg/m ² st Carboplatin AUC x5mg st, CCR < 60 (Cisplatin 50mg/m ² st, CCR ≥ 60) Ifosfamide 4mg/m ² st	Q3W x 6 cycles (1)
Gemcitabine+Docetaxel	D1/D8 Gemcitabine 675-900 mg/m ² D8 Docetaxel 75-100 mg/m ²	Q4W x 6 cycles(2)
標靶治療		
Pazopanib(Votrient) 200mg,4#,QDAC		
荷爾蒙治療(for low grade ESS or ER/PR positive)		
Letrozole(Femara) 2.5mg,1#,QD Megestrol 160 mg/QD Medroxyprogesterone acetate (Farlutal) 500mg 1# QD		

PRINCIPLES OF RADIATION THERAPY FOR UTERINE NEOPLASMS

General Principles–Uterine Neoplasms

- RT is directed at sites of known or suspected tumor involvement and may include EBRT and/or brachytherapy. Imaging is required to assess locoregional extent and to rule out distant metastases before administration of RT. In general, EBRT is directed to the pelvis with or without the para-aortic region. Brachytherapy can be delivered: 1) to an intact uterus, either preoperatively or definitively; or 2) more commonly, to the vagina after hysterectomy. For the purposes of these guidelines, whole abdominal radiotherapy is not considered to be tumor-directed RT.

General Treatment Information

• Target Volumes

- ▶ Pelvic radiotherapy should target the gross disease (if present), the lower common iliacs, external iliacs, internal iliacs, obturators, parametria, upper vagina/para-vaginal tissue, and presacral lymph nodes (in patients with cervical involvement).
- ▶ Extended-field radiotherapy should include the pelvic volume and also target the entire common iliac chain and para-aortic lymph node region. The upper border of the extended field depends on the clinical situation but should at least be 1–2 cm above the level of the renal vessels.
- ▶ Pelvic tissues at risk, especially in the post-hysterectomy setting, can be highly variable depending on bowel and bladder filling. In this situation, the integrated target volume (ITV), which encompasses the range of organ movement and deformation, is considered the clinical target volume (CTV), and should be fully covered in the treatment volume.

• Dosing Prescription Regimen – External Beam

- ▶ External-beam doses for microscopic disease should be 45–50 Gy. Multiple conformal fields based on CT treatment planning should be utilized, and consideration for IMRT for normal tissue sparing may be considered, with appropriate attention to QA and tissue interfraction mobility. Postoperatively, if there is gross residual disease and the area(s) can be sufficiently localized, a boost can be added to a total dose of 60–70 Gy, respecting normal tissue sensitivity.
- ▶ For neoadjuvant radiation, doses of 45–50 Gy are typically used. One could consider adding 1–2 high dose-rate (HDR) insertions to a total dose of 75–80 Gy low dose-rate (LDR) equivalent, to minimize risk of positive or close margins at hysterectomy.

• Dosing Prescription Regimen – Brachytherapy

- ▶ Initiate brachytherapy as soon as the vaginal cuff is healed, preferably 6–8 weeks after surgery but in general initiation of brachytherapy should not exceed 12 weeks. For vaginal brachytherapy, the dose should be prescribed to the vaginal surface or at a depth of 0.5 cm from the vaginal surface; the dose depends on the use of EBRT. The target for vaginal brachytherapy after hysterectomy should be no more than the upper two-thirds of the vagina; in cases of extensive LVSI or positive margins, a longer segment of the vagina may be treated.
 - ◊ For postoperative HDR vaginal brachytherapy alone, regimens include 6 Gy x 5 fractions prescribed to the vaginal surface, or 7 Gy x 3 fractions or 5.5 Gy x 4 fractions prescribed to 5 mm below the vaginal surface. While 7 Gy x 3 fractions prescribed at a depth of 0.5 cm from the vaginal surface is a regimen used by many, the use of smaller fraction sizes may be considered to potentially further limit toxicity in selected cases.
 - ◊ When HDR brachytherapy is used as a boost to EBRT, doses of 4–6 Gy x 2 to 3 fractions prescribed to the vaginal mucosa are commonly used.
- ▶ For medically inoperable uterine cancer, risk of extrauterine spread determines the combination of EBRT plus brachytherapy or brachytherapy alone. Brachytherapy doses for definitive therapy are individualized based on the clinical situation. When available, image-guided therapy should be used. Based on the best available evidence, an EQD2 D90 of at least 48 Gy should be delivered to the uterus, cervix, and upper 1–2 cm of vagina if brachytherapy alone is used, and should be increased to 65 Gy for the combination of EBRT and brachytherapy. If an MRI is used as part of planning, the target dose for the gross tumor volume (GTV) would be an EQD2 of ≥80 Gy.

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PRINCIPLES OF IMAGING
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