

Enhancing Quality of Life Through Pain Intervention in Palliative Care

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When

Where

What

02/80

- 癌痛負擔?
- 神經路徑相關的介入方式-由疼痛來源找到可阻斷的神經路徑
- 類鴉片藥物相關的介入方式
- 何時介入
- 常見介入工具與病例陷阱
- TAKE HOME MESSAGE

癌症病人疼痛盛行率：依治療情境差異明顯

整體疼痛範圍
35.8-55.2%

多數治療情境約每 2 位病人就有 1 位報告疼痛；最低為根治治療後，最高為無可行抗癌治療。

中重度疼痛範圍
22.8-43.3%

中重度疼痛不是少數現象；症狀負擔在晚期與無可行治療族群尤其突出。

最大樣本來源
508,827 人

G7「不同治療階段」納入最多病人；但高風險解讀仍應回到治療階段與疾病狀態。

最高盛行率族群

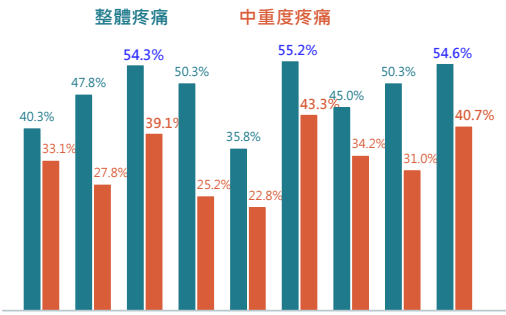
臨床訊息

	整體疼痛 (%)	中重度疼痛 (%)
G6 無可行抗癌治療	55.2	43.3
G9 晚期/轉移/末期	54.6	40.7
G3 緩和治療	54.3	39.1

疼痛評估與止痛策略應優先鎖定疾病晚期、緩和治療、以及無可行抗癌治療病人。

Rolf A H Snijders, Linda Brom, Maurice Theunissen, et al. Cancers (Basel). 2023;15(3):591.

整體疼痛與中重度疼痛：高風險群一致集中



治療中仍需監測
G8：50.3%、31.0%

抗癌治療中病人整體疼痛盛行率仍達半數、亦有三成中重度疼痛。

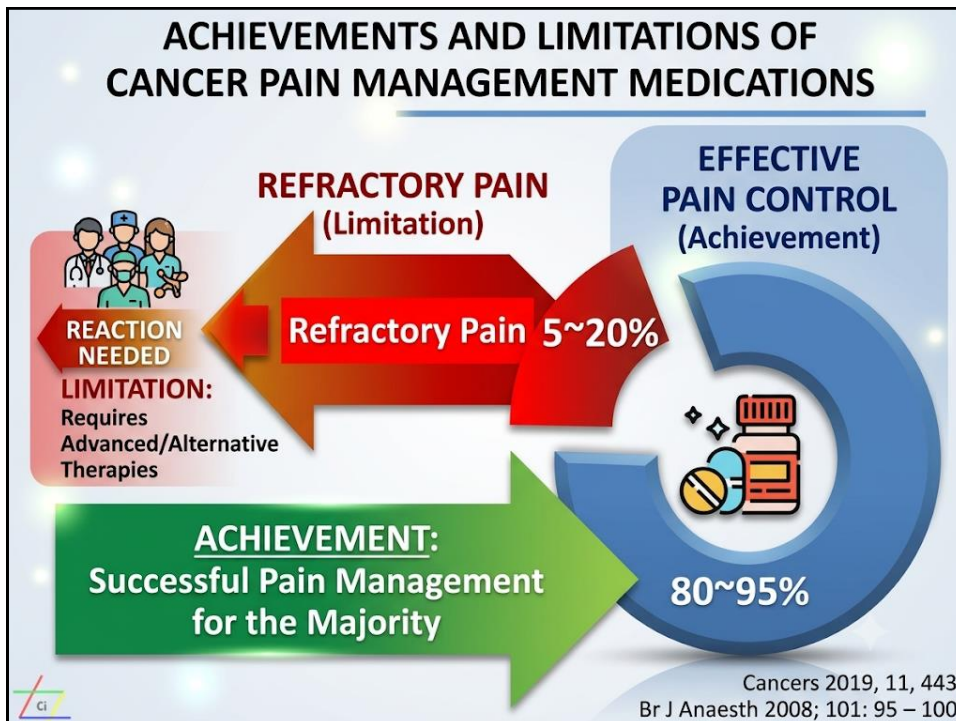
相對較低但不可忽視
G5：35.8%、22.8%

根治治療後仍有超過三分之一病人有疼痛與 22.8% 中重度疼痛，不應被排除於常規篩檢之外。

疼痛負擔最高
G6 / G9 / G3

無可行抗癌治療、晚期/轉移/末期緩和治療。

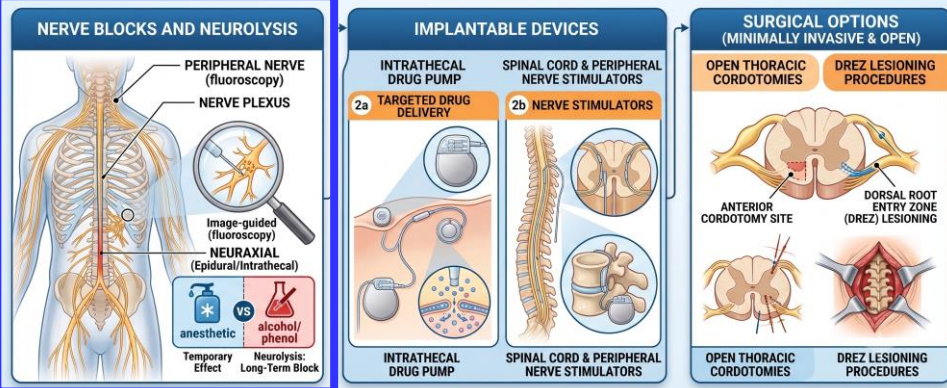
Rolf A H Snijders, Linda Brom, Maurice Theunissen, et al. Cancers (Basel). 2023;15(3):591.



- 癌痛負擔?
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- the management of cancer pain that is broader than that of a single specialty.
- an interdisciplinary approach is essential in order to provide an up to date, patient tailored approach to pain management

POTENTIAL CATEGORIES FOR INTERVENTION: **TIER 1 - NEURAL TARGETS**



Source: Table 1. Potential Categories for Intervention (Reference: <IMAGE 0>)



Yi-Ching Lee, Timothy Brake, Emma Zhao, et al. Support Care Cancer. 2024;32(5):285.

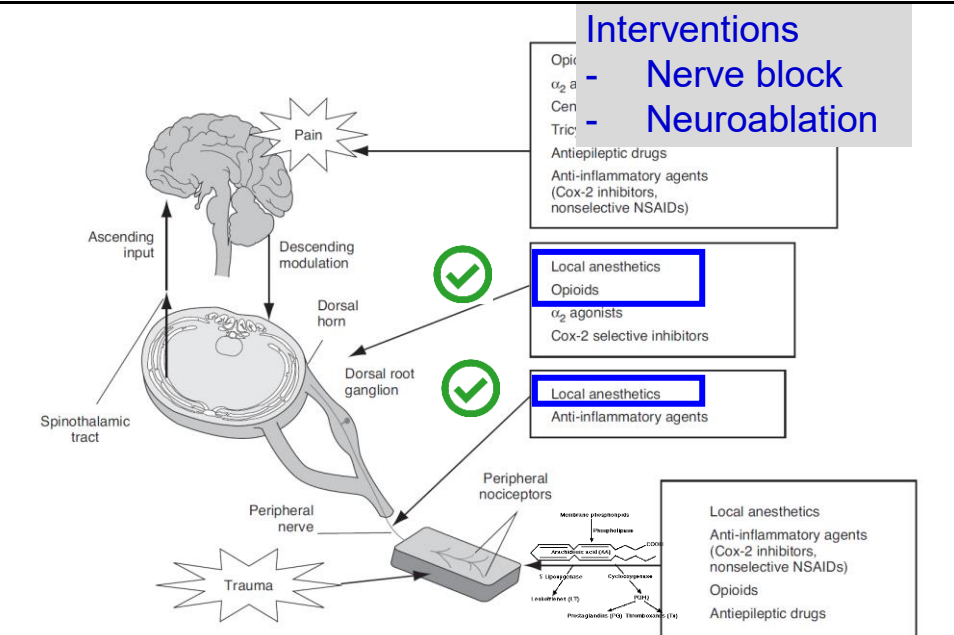
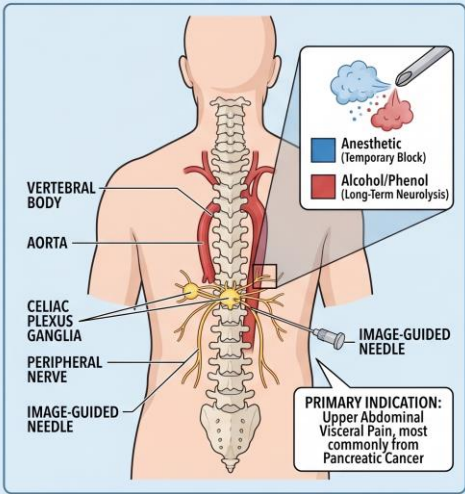


Figure 19-1 Analgesia and the pain pathway. Cox-2, cyclooxygenase-2; NSAIDs, nonsteroidal anti-inflammatory drugs. (Adapted from Gottschalk A. Smith DS: New concepts in acute pain therapy: Preemptive analgesia. Am Fam Physician 2001;63:1979-1984.)

Postoperative Pain Management (First Edition) An Evidence-Based Guide to Practice 2006

INTERVENTIONAL PROCEDURES FOR CANCER PATIENTS

Celiac Plexus Neurolysis (CPN) Procedure Diagram



CPN Clinical Data & Summary (Slide Format)

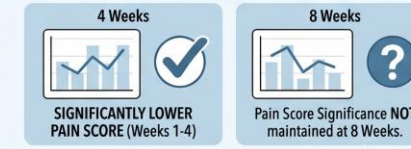
CELIAC PLEXUS NEUROLYSIS: CLINICAL OUTCOMES DATA

Study name	Statistics for each study		Mean diff (Std. Err.)	Z-value	p-value	Forest plot	Relative weight
	CPN Group	Control group					
Zhong, 2000	24/30	12/25	-79.000 (15.246)	-5.180	<.001		23.42
Wang, 2004	14/1100	15/444	-37.000 (88.902)	-3.395	0.100		4.75
Pruthi, 1990	14/19	50/51	-32.000 (88.791)	-3.590	0.012		20.38
Rebecq, 1996	38/428.4	107/466.6	-49.200 (28.791)	-2.370	0.019		14.88
Marcantoni, 1995	23.5/419.41	71.7/442.29	-44.200 (15.282)	-3.879	0.005		24.66
Combined			-49.700 (15.242)	-3.260	0.001		

1 Reduced Opioid Use (Timeline from <IMAGE 0>)



2 Pain Score Outcomes (Data from <IMAGE-2> and text from <IMAGE-1>)



Reference (<IMAGE 0>, <IMAGE 2>):
Wa Zhong, Zhong Yu, Jing-Xian Zeng, et al. Pain Pract. 2014;14(1):43-51.

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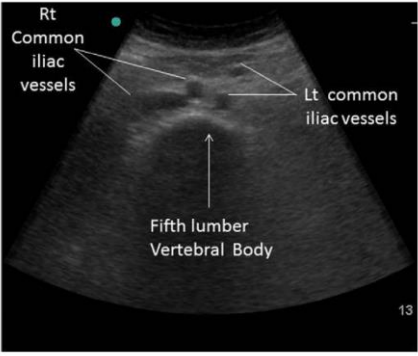


Figure 1 Transverse ultrasound image showing the body of fifth lumbar vertebra with bilateral common iliac vessels.

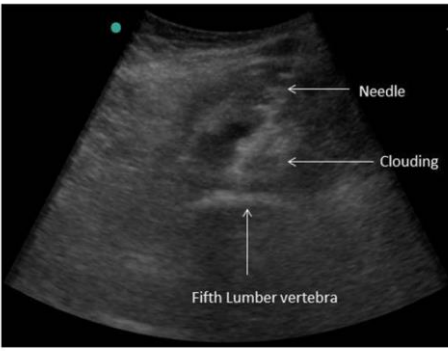


Figure 2 Transverse ultrasound image of the tip of needle positioned at the most-anterior point of the fifth lumbar vertebral body and drug spread in the mid-line in the form of cloud in front of the lumbar vertebra.

Mishra S, Bhatnagar S, Rana SP, et al. Pain Med. 2013;14(6):837-842.



Superior hypogastric block

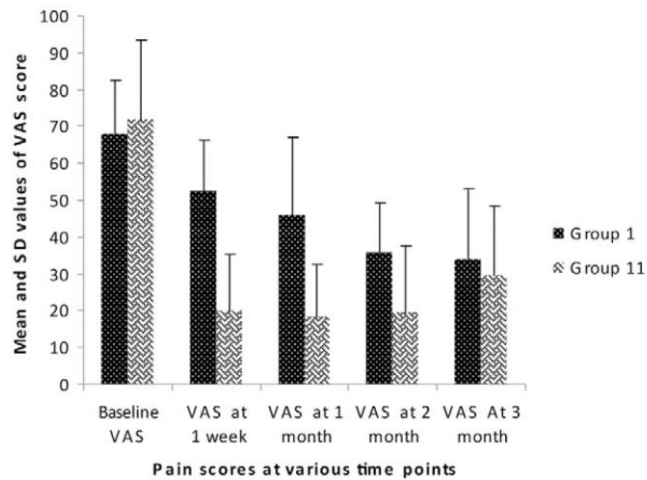


Figure 3 Description of pain scores (visual analog scale [VAS]) at various time points in both groups. SD = standard deviation.

Mishra S, Bhatnagar S, Rana SP, et al. Pain Med. 2013;14(6):837–842.

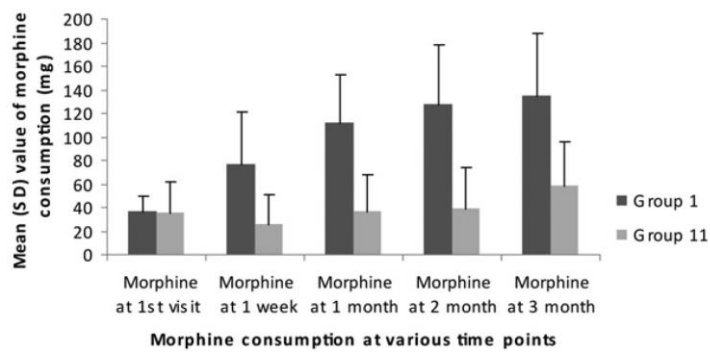


Figure 4 Description of maximum consumption of morphine at various time points in both groups. SD = standard deviation.

Mishra S, Bhatnagar S, Rana SP, et al. Pain Med. 2013;14(6):837–842.

The Candidates :

- Definite pain source
- Identifiable innervation
- Accessible block site



Br J Anaesth. 2008 Jul;101(1):95-100.

神經破壞前的同意重點

16/8
0

- 說明可能不可逆
- 說明可能換來麻木、無力或其他功能代價
- 說明成功率、替代方案與復發可能
- 確認病人最在乎的生活目標

併發症分類

16/8
0

- Block related：穿刺、出血、感染、氣胸等
- Functional related：感覺或運動功能下降
- Agent related：alcohol、phenol、thermal lesion 等造成化學或熱傷害

絕對與相對禁忌

16/8
0

- 絕對禁忌：病人拒絕、藥物過敏、無法配合
- 禁忌：凝血異常、抗凝血治療、感染、既有神經缺損
- 相對禁忌需延後、矯正或重新選擇策略

Opioid 調整與介入後追蹤

- 介入後不能立即假設 opioid 可全部停止
- 需依疼痛、鎮靜、呼吸、便秘與戒斷風險調整
- breakthrough pain 與 baseline pain 要分開追蹤

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NCCN Guidelines Version 1.2026
Adult Cancer Pain

Opioid Reduction

Princip
• Opioid
disea
• Emer
redu
impd
• Educ

- Opioid減量≤10%: low risk of withdrawal
- 病人不需要BTP止痛、已完成acute pain的治療、疼痛可透過non-opioid進行改善、stable disease且疼痛控制良好: Opioid減量
 - 起手式減量5-10% of DAILY MME
 - 後續減量<20%: (多久?頻率? 疼痛沒增加沒有發生 WITHDRAWAL)
 - 減量10-25%: 病人疼痛控制良好(三分以下), 且無難控制的AE (NCCN,2.2019) (多久?頻率?疼痛沒增加沒有發生 WITHDRAWAL)
- Opioid減量50-75%: 病人使用OPIOIDS有嚴重AE

Intolerable symptoms

- Important counseling points include possible risks of opioid overdose, and fewer opioid-related consequences (eg, stable or improved pain and function), improvement in opioid-related side effects, lower risk of opioid overdose, and fewer opioid-related consequences (eg, visits, urine drug screens, co-pays).
- If patient experiences opioid withdrawal symptoms, an opioid taper may be indicated to decrease withdrawal symptoms. Taper can vary greatly depending on length of exposure and opioid dose.
- Risk of opioid withdrawal symptoms is generally low with a ≤10% reduction in morphine equivalent daily dose (MEDD), but the risk and severity of opioid withdrawal may be higher after prolonged opioid therapy, higher doses of opioids, and if the patient is of younger age, among other factors associated with faster opioid tolerance. Opioid withdrawal is not a sign of opioid use disorder (OUD).
- If patient is willing to trial an opioid taper, consider a 5%–10% initial reduction (<https://www.cms.gov/About-CMS/Story-Page/CDCs-Tapering-Guidance.pdf>). Subsequent dose reductions are preferred to be <20% of current MEDD, and the frequency of future reductions is dependent on patient preference and tolerability of dose reductions. When developing a plan to reduce opioid doses, the goal is to improve or maintain current pain control and function and minimize withdrawal symptoms. If patient has worsened pain, function, and/or withdrawal symptoms, consider slowing, pausing, or discontinuing the opioid dose reduction.
 - If opioid taper causes escalating pain, reassess for disease stability and the need for the taper. Consider adding adjuvant analgesics and non-pharmacologic interventions among other modalities to decrease pain experience and improve the patient's coping.
 - If concern for opioid misuse, consider consult to addiction medicine.
- If patient is experiencing unmanageable opioid-related adverse effects, see [PAIN-H](#).
- If patient has rapid clinical deterioration (eg, marked sedation due to sepsis), temporary opioid dose reduction by 50% to 75% may be necessary ([PAIN-H 3 of 3](#)).
- If attempts at opioid dose reduction result in exacerbation of pain, consider referral to a pain specialist and/or the use of interventional strategies.

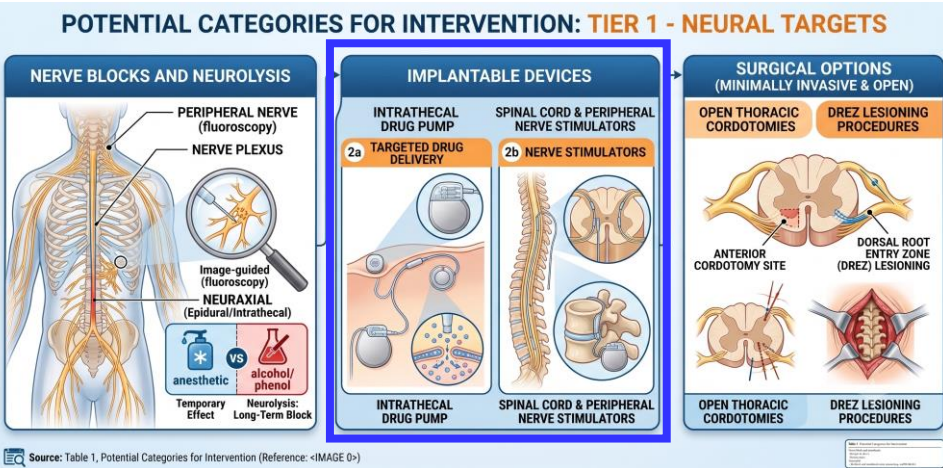
Note: All recommendations are category 2A unless otherwise indicated.

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PAIN-G
3 OF 22

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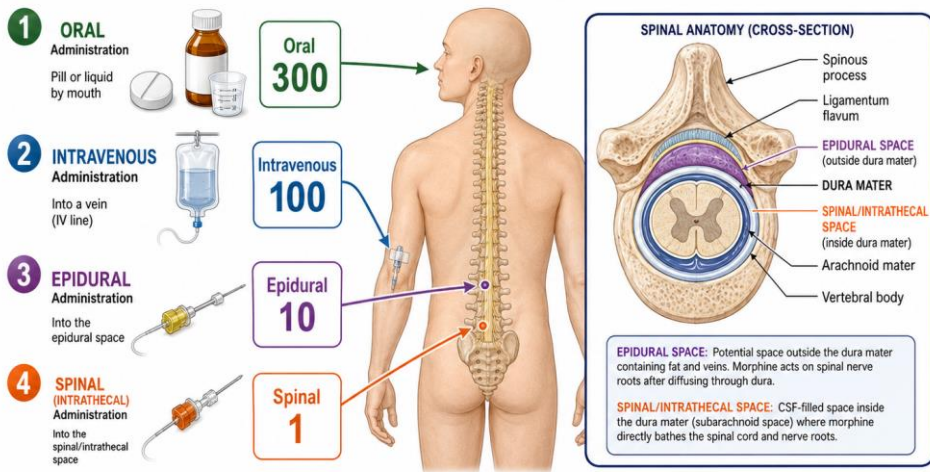
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Morphine Dose Equivalence for Cancer Pain

Relative equivalent doses

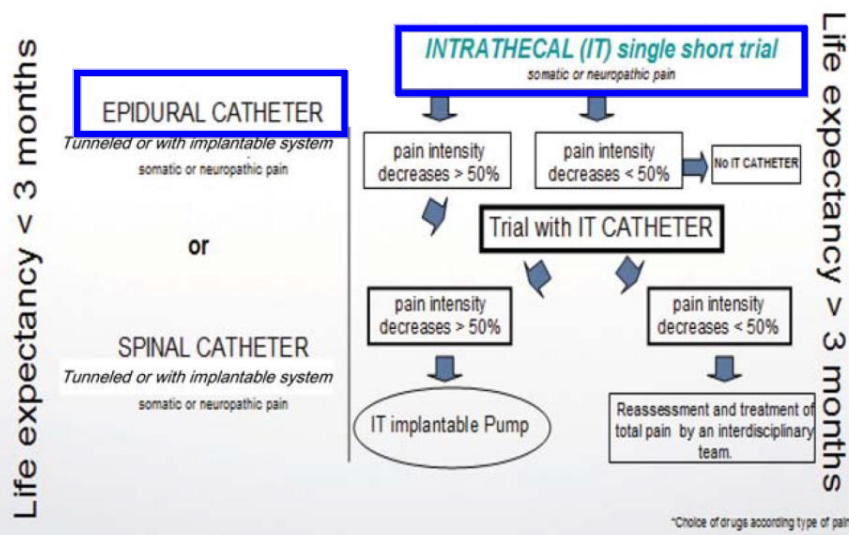


Oral : Intravenous : Epidural : Spinal = 300 : 100 : 10 : 1

Use clinical judgment and patient factors when converting between routes.

These are relative equivalent doses for morphine in adult patients with cancer pain. Individual patient response, prior opioid exposure, organ function, and clinical context must guide dosing.

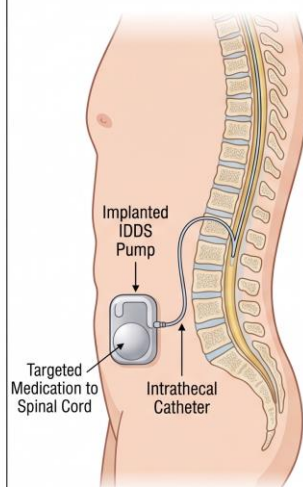
Intrathecal infusion for refractory cancer pain



Ann Oncol. 2012;23 Suppl 7:vii139-54.

Interventional Pain Management for Cancer Patients

Intrathecal Drug Delivery System (IDDS)



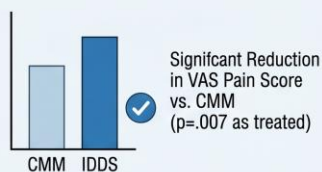
IDDS Clinical Outcomes:

- + Successful Pain Relief (greater than 20% reduction)
- Drug Toxicity (Reduced Fatigue, Depression)
- Trending Improved Survival

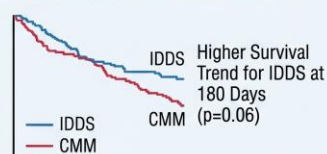
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- Drug Toxicity (Reduced Fatigue, Depression)
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Reduced Pain Score (VAS) - Simplified chart based on <IMAGE_1>



Trending Improved Survival - Simple graph based on <IMAGE-2>



Data-source as <IMAGE-1>, <IMAGE-2>

* Complete citation, Petes Staats, Timothy Deer, et al.

Thomas J Smith, Peter S Staats, Timothy Deer, et al. *J Clin Oncol*. 2002;20(19):4040-9.



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02/80

Cancer Pain

Interventions

When ?

Table 2
Opioid Consumption (Represented in Equivalent
Doses of Oral Morphine Sulfate [mg/d]) During
Follow-Up Period for Both Groups

Time	Group I	Group II	P-values
Second week	65.5 ± 15.4	98.4 ± 16.5	<0.0001 ^a
1 Month	60.8 ± 14.5	95.2 ± 13.5	
2 Months	84.4 ± 29.5	120.5 ± 27.3	
3 Months	107.5 ± 35.5	142.5 ± 31.6	
4 Months	115.6 ± 14.5	160.0 ± 29.5	
5 Months	110.7 ± 27.5	172.5 ± 39.5	
6 Months	119.28 ± 28.5	176.87 ± 38.5	
9 Months	125.3 ± 28.5	153.3 ± 35.7	
12 Months	165.5 ± 20.5	198.0 ± 45.5	
15 Months	188.5 ± 25.5	208.0 ± 45.5	0.007 ^a

Data expressed as mean ± SD.

^aSignificant difference in Group II vs. Group I. Missing data in calculation of mean ± SD because of patient death are compensated for by using the last reported data value. Therefore, 54 and 55 patients were used at all times of assessment in each group, respectively.



J Pain Symptom Manage. 2014 Nov;48(5):944-56.e2.

Cancer Pain

Interventions

When ?

Table 3
Incidence of Opioid Side Effects During the
Follow-Up Period

Side Effects	Group I	Group II	P
Nausea	12	23	0.03 ^a
Constipation	12	26	0.006 ^a
Pruritus	4	16	0.005 ^a
Insomnia	10	8	0.14
Urine retention	3	5	0.09
Loss of appetite	18	21	0.06

^aSignificant difference in Group II vs. Group I, $P < 0.05$.



J Pain Symptom Manage. 2014 Nov;48(5):944-56.e2.

介入是最後一步，還是提早一步？

- 傳統思維常等到藥物失敗後才介入
 - 但病程進展會讓解剖構造扭曲、介入更困難：侵犯與沾黏使入針路徑更受限
 - 可接受風險下，提早介入可能有更好效果
 - 長期高劑量 opioid 也增加副作用與耐受問題

02/80

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Pitfall - 疼痛來源判斷錯誤



 回到病人目標與可接受風險

Pitfall - 忽略結構問題

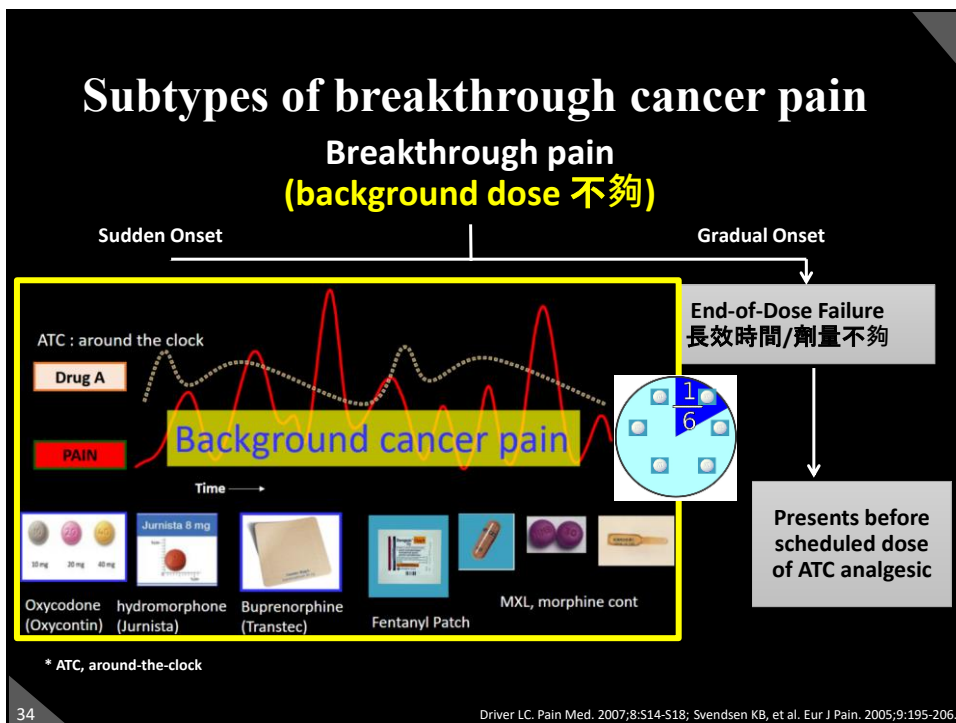
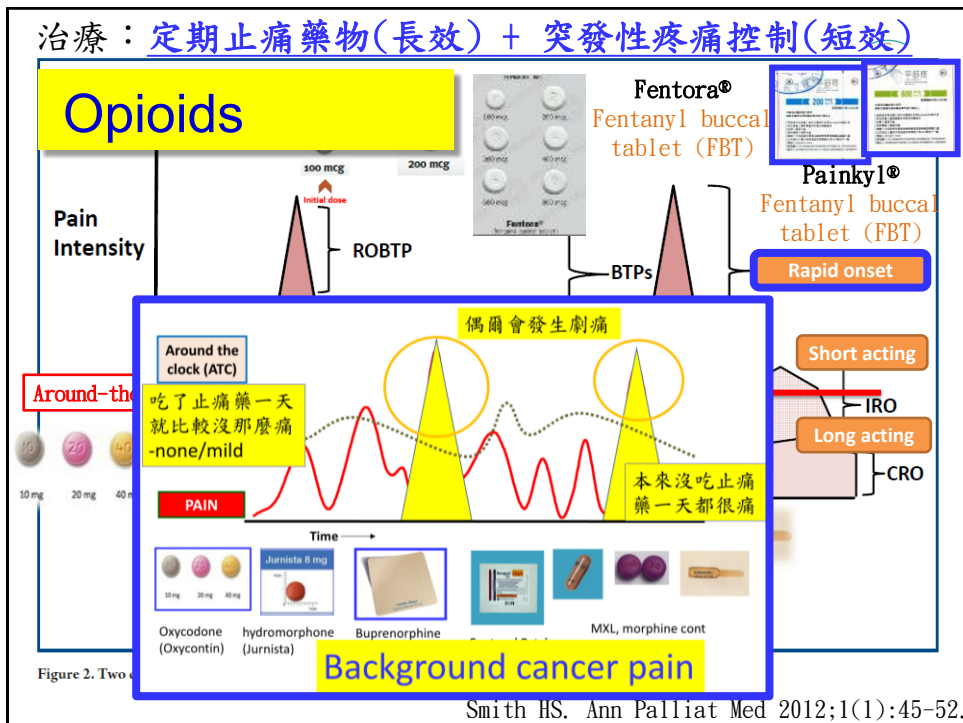


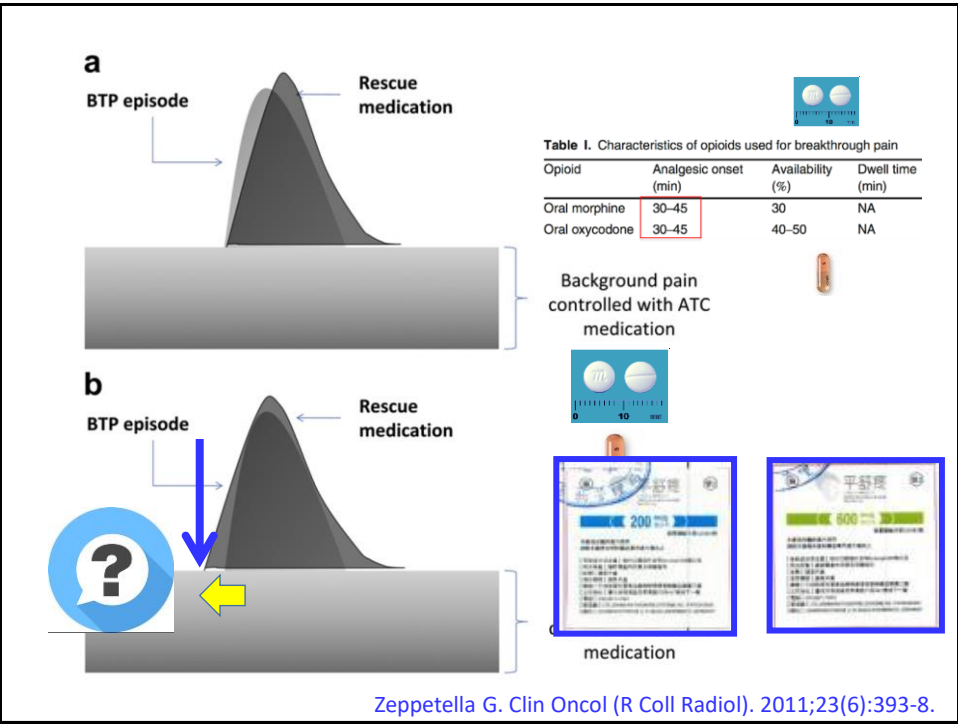
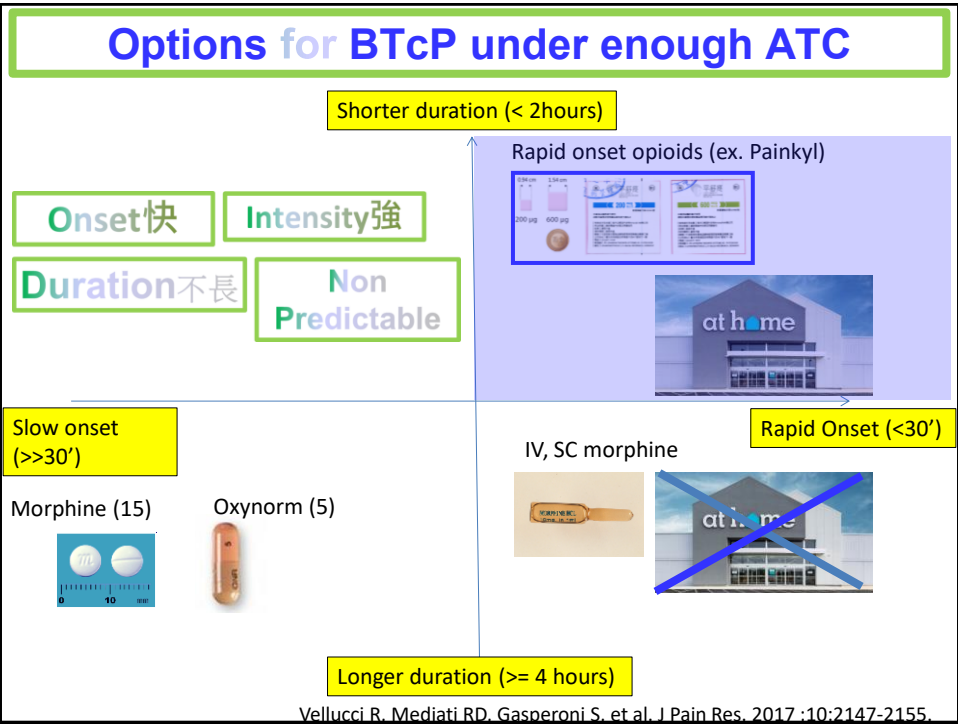
 回到病人目標與可接受風險

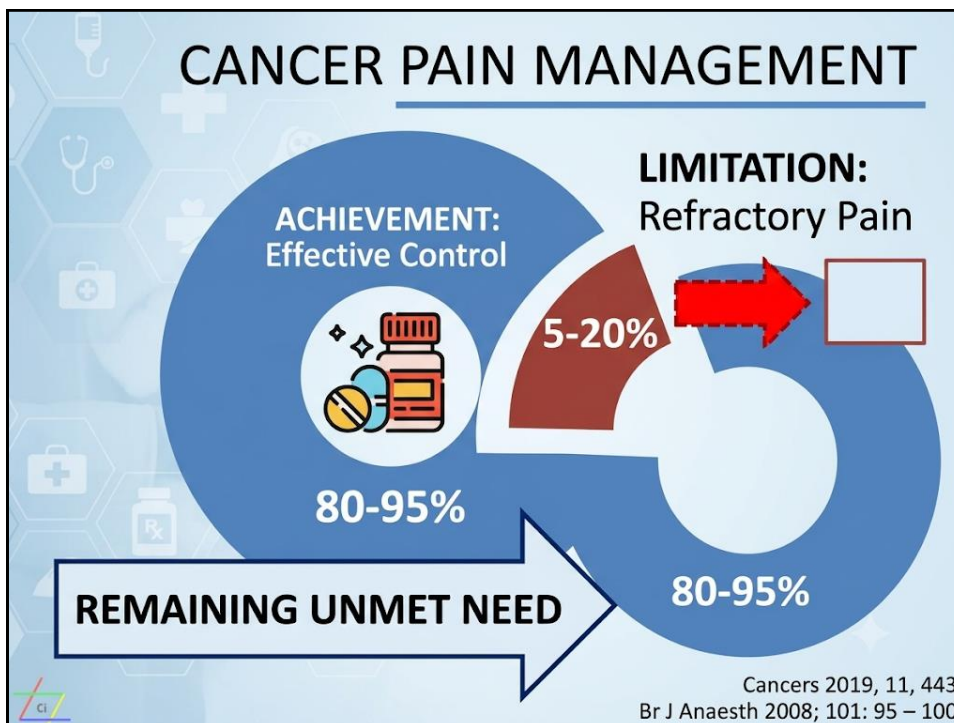
Pitfall - 技術成功不等於病人成功



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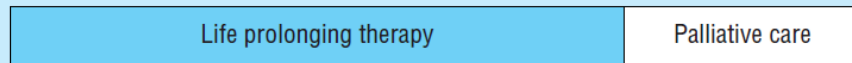
有效疼痛控制之外的 5-20%

多數癌痛可經藥物改善，但仍有一群病人控制不足

- 這群病人的問題常是疼痛強度、
 - 位置或副作用限制
- 介入治療的角色是減少疼痛訊號
或降低藥物負擔

Initial hospice programmes:

predominantly oncology and selected neurodegenerative diseases



Palliative care relevance, current view:

all end stage diseases and clinical settings



Changes in allocation of resources with the development of palliative care

Pain management should be given only when palliative care has been planned!!!

ABC OF PALLIATIVE CARE Second Edition 2006

早期介入的臨床收益

- 解剖構造較清楚時，操作可行性較高
 - 可能降低 opioid 劑量與相關副作用
 - 可讓病人保留功能與治療耐受度