Case discussion
acute PANCREATITIS and Illness Scripts

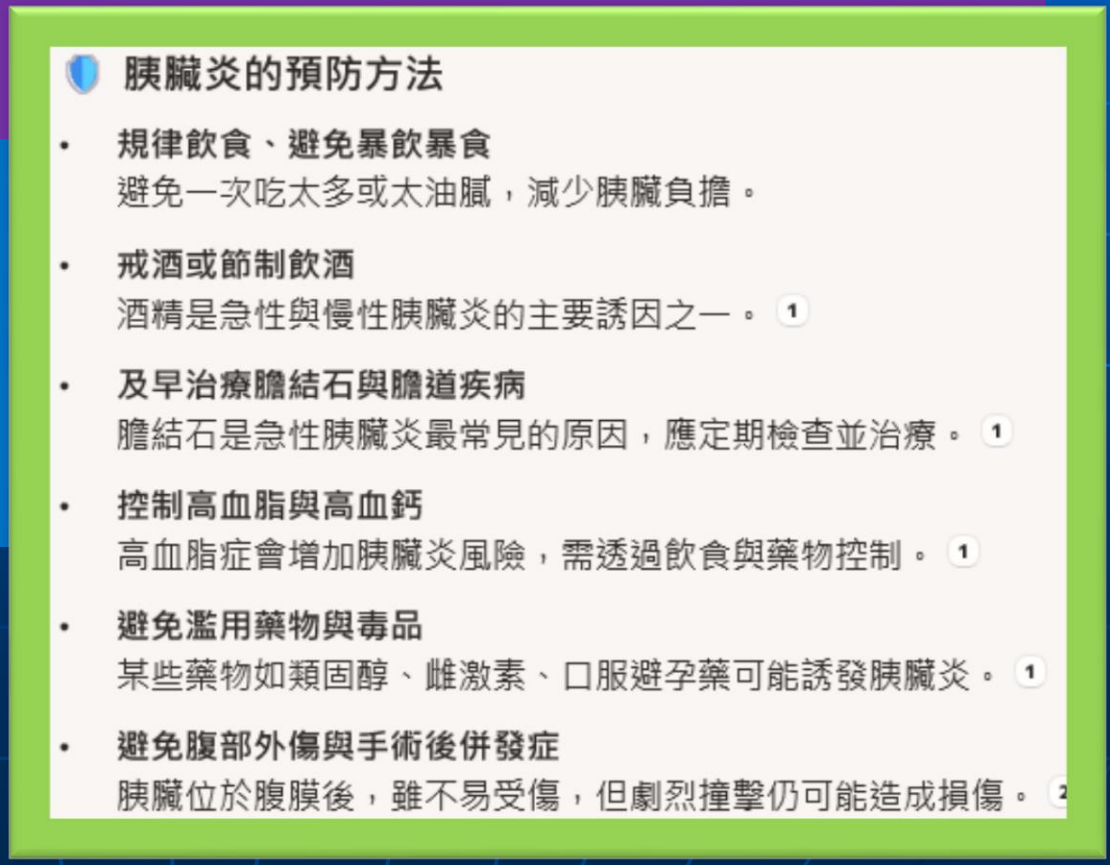
Acute PANCREATITIS, case series
Causes and management

Cheng-Yi WANG

Oct. 17. 2025

- Q1, 急性胰臟炎有很多不同的原因你認為哪一個原因是最容易控制的就是能夠達到預防的目的.

預防胰臟炎的關鍵在於控制飲食、戒酒、治療膽結石、避免濫用藥物，以及管理高血脂等代謝問題。



🍽️ 飲食建議（特別適用於胰臟炎恢復期或高風險族群）

- **採低脂、清淡、少量多餐的飲食**
  每日脂肪攝取量建議低於60克，避免油炸、加工食品。 [1]
- **選擇容易消化的澱粉與蛋白質來源**
  如白米粥、蒸蛋、嫩豆腐、去皮雞肉、細緻魚肉等。 [3]
- **避免刺激性食物與含酒精、咖啡因的飲品**
  包括巧克力、蛋糕、沙茶醬、堅果等。 [1]
- **補充中鏈脂肪酸（如MCT油）需經醫師評估**
  中鏈脂肪酸不需胰液分解，可作為能量來源。 [3]

- 1. A 48-year-old man with a history of dyslipidemia, for which he was prescribed atorvastatin 40 mg/day as a lipid-lowering agent.
- 2. He initially presented to the emergency room with worsening epigastric pain.

用心詢問病史你想問些什麼?

Important clinical history

- 1. Epigastric pain persisting for 12 days and worsening the day before admission. The pain was described as radiating diffusely across the abdomen and exacerbated by fatty meals. Associated symptoms included nausea, vomiting, fatigue, and night sweats
- 2. The patient had no history of alcohol or tobacco use. No previous abdominal sono was done-→ No gall stone
- 3. dyslipidemia, 已有多久, lipid profile data ? 以前用過什麼藥---最近初學檢查才知道膽固醇過高,第一次使用 lipitor, 已有3個星期已有2月,每次使用兩粒,一天一次. 兩周前增為一天３粒. 抽血結果沒有明顯改善.
- 4. FH: 無胃腸道或胰臟疾病家族史。

- 身體檢查：血壓正常（117/70 mmHg），心率78次/分，呼吸19次/分，體溫36.7℃。
- 腹部體檢：上腹部輕度壓痛，無反跳痛或肌肉緊張，無肝腫大及腹水徵象。

抽血檢驗常是第一個重要的步驟在這種情形下你要做哪一些檢驗

Laboratory findings (at admission and 1 day later).

Laboratory parameter	At admission	Day 1 after admission	Normal range (mmol/L)
Triglycerides	NA	0.53	<1.7
Cholesterol	NA	2.7	<5.18
HDL	NA	0.93	1.04–1.55
Non-HDL cholesterol	NA	1.77	<3.37
LDL	NA	1.6	<2.59
ALT	113 U/L	108 U/L	7–56 U/L
Amylase	3273 U/L	1733 U/L	30–110 U/L
Lipase	2503 U/L	1147 U/L	10–140 U/L
Total bilirubin	45.8 μmol/l	23.4 μmol/L	5.1–20.5 μmol/L
Alkaline phosphatase	125 U/L	125U/L	40–130 U/L

AST, GGT: not examined.
Direct bilirubin ：ＮＡ

以上結果怎麼樣分析

🧪 Bilirubin 常見單位換算

單位	說明	換算公式
mg/dL	毫克 / 分升，美國常用	1 mg/dL = 17.1 μmol/L
μmol/L	微摩爾 / 公升，歐洲與台灣常用	1 μmol/L = 0.0585 mg/dL

> ✅ 換算範例：若總膽紅素為 1.2 mg/dL，美式報告 → 換算成歐式報告為約 20.5 μmol/L。

🧪 為什麼會有不同單位？

- 美國與部分亞洲地區偏好使用質量單位（如 mg/dL），因為早期檢驗儀器與教科書多以此為基礎。
- 歐洲與國際標準化趨勢則偏好使用摩爾濃度（如 μmol/L），強調物質的「分子數量」而非「重量」，更符合化學與藥理學的精確性。

🧠 臨床應用提醒

- 總膽紅素（**Total Bilirubin**）：正常值約 0.3–1.2 mg/dL 或 5–21 μmol/L。
- 直接膽紅素（**Direct Bilirubin**）：正常值約 0.1–0.3 mg/dL 或 1.7–5.1 μmol/L。
- 間接膽紅素（**Indirect Bilirubin**）：總膽紅素減去直接膽紅素。

2.68mg/dl 1.37 mg/dl

Total bilirubin	45.8 μmol/l	23.4 μmol/L	5.1–20.5 μmol/L
Alkaline phosphatase	125 U/L	125U/L	40–130 U/L

- Laboratory investigations revealed significantly elevated pancreatic enzymes, with amylase at 3273 U/L and lipase at 2503 U/L, consistent with the diagnosis of AP.
- Liver function tests showed mildly elevated alanine aminotransferase (ALT) at 113 U/L and total bilirubin at 45.8 μmol/L, while alkaline phosphatase and creatinine levels were within normal limits. A lipid profile ruled out hypertriglyceridemia as a cause.

Dyslipidemia引起acute pancreatitis 原因：

- Dyslipidemia, the condition for which the patient was prescribed atorvastatin, is known to be associated with hypertriglyceridemia, a recognized independent risk factor for AP. However, the patient’s triglyceride levels were within normal limits at the time of admission, ruling out hypertriglyceridemia as a potential contributor. This finding reinforces the likelihood that atorvastatin itself was the causative agent in this case.

- A literature review reveals that statin-induced AP is not limited to atorvastatin; similar cases involving simvastatin and pravastatin show symptom resolution upon discontinuation, supporting a potential class effect of statins in inducing AP

Tarar ZI, Zafar MU, Ghous G, et al. Pravastatin-induced acute pancreatitis: A case report and literature review. J Investig Med High Impact Case Rep. 2021;9:23247096211028386. doi: 10.1177/23247096211028386.
Johnson JL, Loomis IB. A case of simvastatin-associated pancreatitis and review of statin-associated pancreatitis. Pharmacotherapy. 2006;26(3):414–22. doi: 10.1592/phco.26.3.414

5. Shen HN, Lu CL, Li CY. Epidemiology of first-attack acute pancreatitis in Taiwan from 2000 through 2009: a nationwide population-based study. Pancreas. 2012;41(5):696-702

- 2000年至2009年台灣全民健康保險研究資料庫中107,349例首次發作AP的患.
- 首發AP年平均發生率36.9/10萬人.
- 所有病例的住院死亡率從4.3%下降至3.3%，重症病例的住院死亡率從18.5%下降至13.3%。
- 根據臨床通報與回顧性研究，Lipitor 引發急性胰臟炎的發生率約為 0.001%–0.003%，即每 100,000 名使用者中約 1–3 人。

SLE and acute pancreatitis

J Med Case Rep. 2025 Mar 4;19:95. doi: 10.1186/s13256-025-05119-z

Acute pancreatitis as an initial presentation of systemic lupus erythematosus: a case report

Mengyu Li [1], Sutong Li [1,✉]

患者為47歲漢族女性，症狀為上腹痛、噁心、嘔吐胃內容物、食慾不振。患者無相關病史，不飲酒，不食油膩食物。患者先後被診斷為急性膽囊炎、急性胰臟炎和急性闌尾炎，但相關治療措施均未能改善胃腸道症狀。腎臟病理檢查結果以及抗核抗體和抗雙股DNA檢測陽性，支持SLE的診斷。
多次胰臟酶測定顯示胰臟酶水平升高，其中：
尿澱粉酶1046 U/L（參考範圍<600 U/L）；
血澱粉酶161 U/L（參考範圍35～135 U/L）；
血脂酶81 U/L（參考範圍<60 U/L）。

40% 至 60% 的 SLE 患者常見胃腸道症狀，但以急性胰臟炎為首發表現的情況極為罕見 。 SLE 胰臟炎可能由血管炎引起，組織學特徵為血管炎和血栓形成 。少數 SLE 胰臟炎病例中可發現伴隨抗磷脂抗體 (aPL) 。

1.Frittoli RB, Vivaldo JF, Costallat LTL, Appenzeller S. 系統性紅斑狼瘡的胃腸道受累：系統性回顧。 J Transl Autoimmun。 2021;4:100106。
2.Wang F, Wang NS, Zhao BH, Tang LQ. Acute pancreatitis as an initial symptom of systemic lupus erythematosus: a case report and review of the literature. World J Gastroenterol. 2005;11(30):4766–8.

Case Reports > Cureus. 2025 Sep 3;17(9):e91544. doi: 10.7759/cureus.91544. eCollection 2025 Sep.

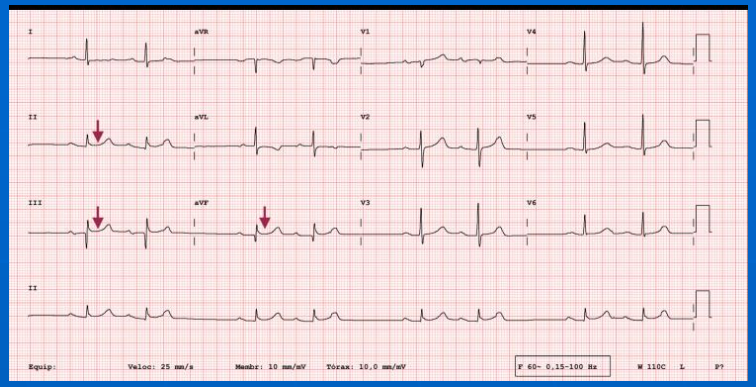
Acute Pancreatitis Presenting as Inferior Wall Myocardial Ischaemia: A Case Report

Inês Ferreira [1], Inês Fiúza M Rua [1], Diogo Ramos [1], Sérgio Cabaço [1], André Valente [1]

Affiliations – collapse

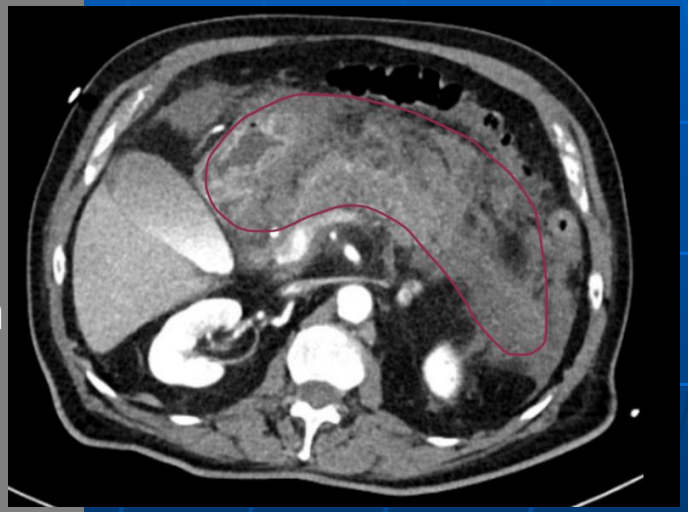
Affiliation

1 Internal Medicine, Unidade Local de Saúde São José, Lisbon, PRT.



Admission ECG mimicking an inferior wall STEMI, with ST-segment elevation in the inferior leads as shown by the arrows. STEMI: ST-elevation myocardial infarction.

- a 92-year-old male patient with epigastric pain, whose electrocardiogram (ECG) was concerning for inferior wall ST-elevation myocardial infarction (STEMI) and who was admitted for angioplasty. The final diagnosis after complete blood work was stable corona artery disease, and the patient was found to present with underlying necrohaemorrhagic pancreatitis.



The patient died 48 h after admission. This case highlights the rarity and difficulty in discerning a true inferior wall STEMI and a pancreatitis mimicking the ACS and underscores the importance of reporting such cases to raise clinical awareness and guide appropriate management.

Case Reports > Clin Ter. 2025 Jan-Feb;176(1):47-51. doi: 10.7417/CT.2025.5164.

Post-colonoscopy pancreatitis: a case report and a systematic review of the literature

I D Gkegkes [1] [2], A P Stamatiadis [2]

Affiliations – collapse

Affiliations

1 Athens Colorectal Laboratory, Athens, Greece.
2 Department of Colorectal Surgery, Royal Devon and Exeter NHS Foundation Trust, Exeter, UK.

Twelve patients were included from 11 case reports
The principal indication for colonoscopy was cancer/polyp surveillance (7 out of 12, 58.3%). Polypectomy was performed in 9 patients (75%). In 4 out of 12 cases (33.3%) the procedure of colonoscopy was characterised as difficult and external manipulation was necessitated.
The mean onset of symptoms was **8 hours after colonoscopy** (range: 2 - >24). Hospitalization was necessary in 9 out of 12 patients . The median duration of symptoms was 7 days (range: 3-12). No complications were reported. The mean follow-up period of the included patients was 15 months (range: 3-36). No fatalities were reported.

這樣的病人應如何處理－１

- １．首先思考急性胰臟炎的原因，認為藥物是可能性最高的原因
- ２Initial management consisted of supportive care, including hydration with lactated Ringer’s solution at 125 mL/hour and symptomatic treatment with metoclopramide for nausea and paracetamol for analgesia. Atorvastatin was promptly discontinued. The patient was maintained on a low-fat diet and closely monitored for symptom resolution.

這樣的病人應如何處理－2

- 3 During a 2-day hospital stay, pancreatic enzyme levels decreased significantly (lipase: 1147 U/L, amylase: 1733 U/L), and the patient's abdominal pain improved. He was discharged with prescriptions for paracetamol for residual pain and pantoprazole 40 mg for gastroprotection. At follow-up, he reported complete resolution of symptoms, with no recurrence of AP.

Naranjo Scale

- Naranjo Scale 是一套標準化工具，用來判定「藥物是否導致不良反應」的可能性，透過 10 個問題進行量化評估。
- 這個量表由 Naranjo 等人於 1981 年提出，廣泛應用於臨床藥學、藥物安全監測與不良反應通報。它的核心價值在於提供一個「系統化、可重複」的因果判斷框架。

1. 是否有先前報告過此反應？
2. 停藥後是否改善？
3. 再次使用是否復發？
4. 是否有其他可能原因？
5. 反應出現時間是否合理？
6. 血中藥物濃度是否異常？
7. 安慰劑試驗是否也出現反應？
8. 是否有客觀證據支持？
9. 是否曾用同類藥物出現同類反應？
10. 反應是否符合該藥已知副作用？

Naranjo scale showing score in this case [9].

Clinical question	Yes	No	NA	Result
Are there any previous solid reports on this reaction?	+1	0	0	+1
Did the adverse event occur after the suspected agent was administered?	+2	−1	0	+2
Did the adverse reaction resolve once the drug had been stopped or a specific antagonist was administered?	+1	0	0	+1
Did the adverse reaction develop after the agent was re-administered?	+2	−1	0	0
Are there any additional reasons that could have caused the reaction?	−1	+2	0	+2
Did the reaction reappear when a placebo was given?	−1	+1	0	0
Was the agent detected in any body fluid in toxic concentration?	+1	0	0	0
Was the reaction worse when the dose was raised, or less severe when the dose was reduced?	+1	0	0	0
Did the patient react similarly to the same or similar agents in earlier exposures?	+1	0	0	0
Was the adverse event supported by objective evidence?	+1	0	0	0
				Total score 6

Scoring: <1: doubtful, 1–4: possible, 5–8: probable, >9: definitive for adverse drug reaction

	判定結果
	*非常可能*與藥物有關
	*很可能*與藥物有關
	*可能*與藥物有關
	*不太可能*與藥物有關

Colonoscopy for a 51 year old woman

- 一名 51 歲女性，過去有糖尿病和高血壓病史，因深色糞便入院。她遵醫囑服用胰島素和賴諾普利，否認飲酒、吸菸和濫用非法藥物，也未通報外傷史。體檢時，腹部檢查無異常，直腸指檢在直腸穹窿處發現咖啡渣樣糞便，潛血試驗陽性。除血紅素低（9.8 mg/dL）外，她的血清化學和血液檢查結果都正常。後來，由於她父親有大腸癌家族史且需要進行普遍篩檢，她安排了大腸鏡檢查。用 2 L 水中聚乙二醇準備她的腸道。作為術前用藥，經由快速運轉的靜脈導管在 10 秒內單次注射 50 mg 咪達唑侖和丙泊酚。大腸鏡檢查引導至迴腸末端，穿過迴盲瓣無困難，總插管時間為10分鐘。檢查結果顯示乙狀結腸內有一枚無蒂息肉，升結腸內有一枚息肉。兩枚息肉皆使用冷圈套器切除，術中未使用電燒。

患者在術後兩小時突然出現瀰漫性腹部疼痛。腹痛劇烈，嚴重程度為 8/10，放射至背部，隨後出現噁心，嘔吐兩次，嘔吐物中含有清澈的液體。這是她一生中第一次出現這樣的疼痛。她發燒，心率為 98 次/分，呼吸頻率為 25 次/分，血壓為 130/90 mmHg

要怎麼辦？

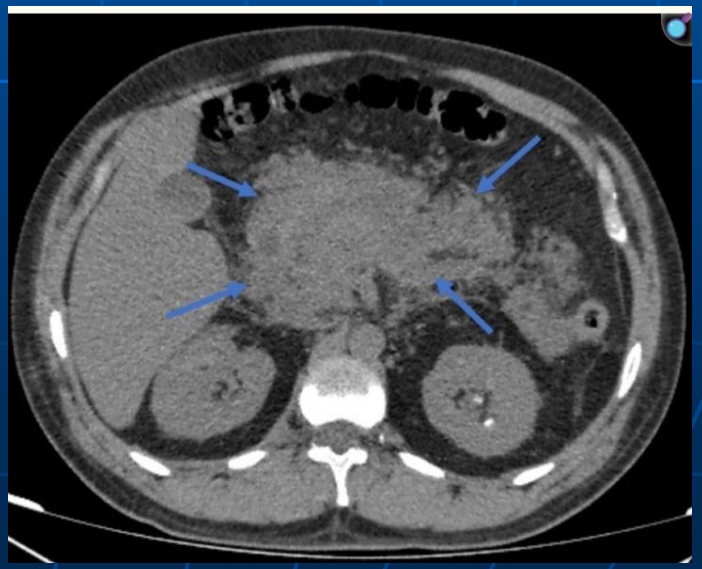
- 檢查時，她有上腹壓痛，沒有器官腫大和腹膜炎的徵兆。心血管和呼吸系統檢查無異常。血液檢查結果顯示白血球數升高（12,100 個/mm3）**CRP:** ０·３１ ｍｇ／ｄｌ

下一步要怎麼辦？

表 1. 大腸鏡檢查前後的實驗室結果。

範圍	大腸鏡檢查前	大腸鏡檢查後	參考值
白血球計數	6900	12,100	4000-11,000個細胞/立方毫米
紅血球計數	4.9	4.8	4.45-5.65百萬個細胞/mm^3
脂肪酶	140	1619	0-160 國際單位/公升
澱粉酶	88	502	30-110國際單位/公升
C反應蛋白	09	31	0-5毫克/升
丙氨酸氨基轉移酶	三十七	三十九	7-55國際單位/公升
天門冬胺酸氨基轉移酶	三十	三十二	8-48國際單位/公升
鹼性磷酸酶	68	71	36-92毫克/分升
凝血酶原時間	11.5	11.4	11-13.5秒
部分凝血活酶時間	三十二	三十五	30-40秒
總膽紅素	1.2	1.4	0.3-1.3毫克/分升
血清肌酸酐	0.8	1.1	0.7-1.2毫克/分升
血中尿素氮	15	17	14-20毫克/分升

腹部直立X光檢查，結果顯示膈下沒有遊離氣體。腹部超音波未顯示胰腺，未報告肝臟和膽管異常，也未發現膽結石和膽道結石。



- 患者禁食，並給予保守治療，包括腸道休息、靜脈輸液、止痛藥、止吐藥和預防性抗生素；她的病情有所改善。每天監測脂肪酶和澱粉酶水平。腹部症狀在幾天內迅速改善，腹痛、發燒完全消退，血清澱粉酶和脂肪酶水平在七天內恢復正常。一周後她出院並進行追蹤。

The pathophysiology for the development of acute pancreatitis in such cases is uncertain, and it has been proposed that moving the endoscope through the bowel causes indirect injury to the body and tail of the pancreas due to the anatomic proximity of splenic flexure to the pancreatic tail [5,13]. Pancreatic injury may occur due to excessive bowel distension caused by gas insufflation. Furthermore, excessive external pressure may also trigger local trauma and inflammatory response. A second explanation could be the use of electrocautery during polypectomy, which is capable of causing transmural burns, mechanical trauma, and irritation to the pancreas and may precipitate an inflammatory response resulting in acute pancreatitis ·

生病的故事→完成疾病劇本應具備哪些內容

Cheng-Yi Wang

2025.10.17

疾病劇本之主要內容

- 1.疾病的特色,--前言
- 2.流行病學, 特別是本土的相關報告
- 3.主要的症狀及徵象—problem list
- 4.診斷依據
- 5.處理原則(規範)guidelines
- 6.Outcome, 影響預後之重要因素.
- 7. 居家醫療之重點事項(home care)

完整的疾病劇本必須包括:

- 1.生病的原因,演變,就醫時的問題,含主訴
- 2.診斷,診斷依據.
- 3. 治療方式以及治療反應
- 4.住院醫療中的變化,有無改善有無惡化.
- 臨床變動之原因.
- 5. 最后的結局. (Final outcome)

完整本的疾病劇本

- 1.劇情概要 – summary
- 2.病因—roots
- 3.影響預後之重要因素—risk factors
- 4. 臨床問題 problem list—含主訴
- 5.診斷,診斷依據
- 6. 必須鑑別之其他疾病及鑑別重點
- 7.治療規範
- 8.故事主角接受之治療及效果評述
- 9.故事末了—最后的結局
- 10.劇作家的感言

分項敘述

- I. 流行病學探討即臺灣相關之報告
- II,劇情變動之相關誘因
- a, 為何惡化
- b. 改善之相關要件, 及效果
- III.疾病未來動向
- a,居家醫療之重點
- b. 生活必要之改變
- c. 收集眾多案件之報告,敘述後果關鍵因素
- IV. 本病最新進展 –2020以後之報告提出之新觀點, 新治
- 療方式或病因之發現
- V.閉幕前主角要說的話以及劇作家的感言
- VI.參考文獻(建議十篇以內,不超過15篇)

結論(2025.10..17)

- 1. 我們提出不同原因發生急性胰臟炎包括使用包Lipitor 及大腸內視鏡檢查.這是一個值得重視的臨床問題
- 2.請大家參考文獻后,提出報告.
- 3.這個課題會完成會成為臨床推理這一本
- 書的重要內容. 各位都將是這本書的作者
- 4. 請大家在2個星期內完成.

可能以單獨提出也可以四五個同學聯合提出,
提出超過兩篇時,可以做一個專題討論分析各位報告或內容的優缺點