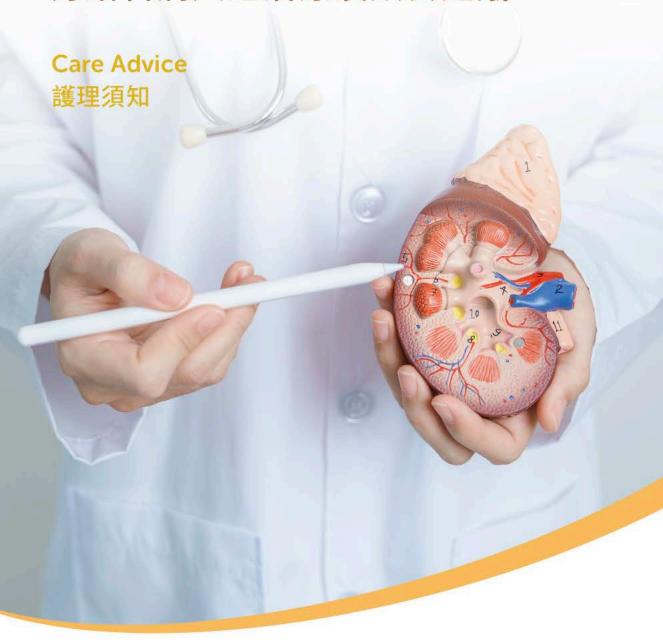
# **Treatment and Dietary Advice** for Renal Stone Patients

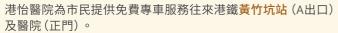
腎結石病人之治療及飲食建議





## Free Shuttle Service 免費專車服務

Gleneagles Hospital Hong Kong provides free shuttle bus service between MTR **Wong Chuk Hang Station** (Exit A) and the hospital (main entrance).





## MTR 港鐵

Gleneagles is within walking distance from MTR Ocean Park Station (Exit C).

您可由港鐵海洋公園站(C出口)步行至港怡醫院。



#### Hospital address

1Nam Fung Path, Wong Chuk Hang, Hong Kong

### 醫院地址

香港黃竹坑南風徑1號

Mainline 電話+852 3153 9000Service hotline 服務熱線+852 2122 1333Fax 傳真+852 2528 0081

### **f** in 港怡醫院 Gleneagles Hospital Hong Kong

# **Treatment and Dietary Advice** for Renal Stone Patients

腎結石病人之治療及飲食建議





## Formation of renal stone 腎結石之形成

Renal stones (also called kidney stones) are hard deposits made of minerals and salts that form inside the kidneys. At times in concentrated urine, these hard deposits crystallise and cluster together which may form renal stones.

腎結石是由腎臟內形成的礦物質和鹽組成的硬沉積物。 若尿液濃縮,礦物質結晶並粘便有機會形成腎結石。

## Signs and symptoms of renal stone 腎結石病徵

- Blood in urine 血尿
- Loin pain 腰部疼痛
- Urinary infections 尿道炎
- Pain and burning sensation during urination 排尿時有疼痛和燒灼感

- Difficulty in passing urine 排尿困難
- Ureteric colic-if renal stones migrate from the kidney into the ureter, narrowing the tract that connects the kidney and the bladder, this can cause severe loin pain that requires emergency medical treatment.

輸尿管絞痛-如結石從腎臟移到輸尿管,令連接 腎臟和膀胱的管道變窄,便可能會導致嚴重的腰痛, 需要緊急醫療處理。

## Treatment of renal stone 腎結石治療

There are medical and surgical treatments for renal stones: 腎結石治療分為內科治療和手術治療:

## Medical treatment 內科治療

Medical treatment of renal stones includes the change of dietary habits and medical expulsion therapy of renal stones. For the details of treatment, please consult your urologist.

腎結石內科治療包括飲食習慣改變和腎結石醫學藥排出療法。 治療詳情請向泌尿科專科醫生查詢。

## Medical treatment 外科治療

There are a number of surgical treatment options for renal stones.

Doctors will decide which surgical option provides the best outcome for each individual patient according to the stone size and position.

Surgical options include percutaneous nephrolithotomy, extracorporeal shock wave lithotripsy, and ureteroscopic lithotripsy. For the details of surgery, please consult your urologist.

腎結石手術的手術治療方式多樣,醫生會根據腎結石的大小和位置, 決定適合病人的手術方式,務求為患者提供最佳的治療效果。 手術治療種類包括:經皮腎鏡取石手術、體外衝擊波碎石術,以及輸尿管 內視鏡碎石手術。手術詳情請與泌尿科專科醫生查詢。



## Dietary advice for renal stone patients 腎結石病人之飲食建議

- Advise to have fluid intake 2.5L-3L per day, including water, soup and juice, etc, especially patients who work in hot environment and sweat frequently.
- 建議每天喝2.5至3公升的流質包括水、湯和果汁等,特別是要在 炎熱環境中工作而經常出汗的患者。
- Avoid drinking mineral water.
   避免飲用礦泉水。
- Avoid concentrated Chinese tea and instant coffee, not more than two cups of diluted Chinese tea per day is recommended. 避免飲用濃縮中國茶和即溶咖啡,建議每日飲用不超過兩杯 稀釋中國茶。



## Reduce calcium stone formation 減少鈣結石之形成

 Patients should have an adequate intake of high-calcium foods to satisfy the body needs. For example, fish with bone, preserved shrimp, preserved squid, preserved oyster, sea cucumber, soybean, soybean by-products such as bean curd, with a maximum intake of 3-4 eggs per week.

病人應攝取適量高鈣食物以滿足身體所需,例如:帶骨魚、醃蝦、 醃魷魚、 醃蠔、海參、黃豆,以及黃豆副產品如豆腐。每周最多 進食3-4隻雞蛋。

 Avoid excessive intake of supplements of vitamin C, vitamin D and calcium unless after discussion with your doctors. Excessive vitamin C or vitamin D will increase the urinary excretion of oxalate which contributes to calcium stone formation.

除非醫生建議處方,否則避免服用過多維他命C、維他命D和鈣的補充劑。過量的維他命C或維他命D會增加草酸鹽的尿液排洩, 導致鈣結石的形成。







 Avoid taking refined carbonate including white sugar, yellow sugar, candy, soft drinks, concentrated fruit juice, sweet biscuit, sweet bun and dessert.

避免攝取精製碳酸鹽包括白糖、黃糖、糖果、汽水、濃縮果汁、 甜麵包和甜點。  Avoid high-sodium foods including luncheon meats, ham, sausage, preserved vegetables and meats, salty egg and processed food. Also, seasonings such as chicken powder, soy sauce, MSG, oyster sauce, fermented soybeans and fermented bean curd.

避免攝取高鈉食物包括午餐肉、火腿、香腸、醃製蔬菜和肉類、 鹹蛋和加工食品,以及雞粉、醬油、味精、蠔油、豆鼓、腐乳等調味料。

 Avoid high-oxalate foods including strawberry, berries, prune, plum, spinach, sweet potato and haricot bean.

避免高草酸食物包括草莓、莓果、西梅、李子、菠菜、番薯和扁豆。



# Reduce uric acid stone formation 減少尿酸石之形成

• Patients with uric acid stones should conduct regular checks on urine acidity, It is advised to keep a pH level of 6.

尿酸石之病人應定時檢測小便的酸鹼度水平,建議保持酸鹼值為6。

 Avoid taking a large amount of high calcium, sodium and refined carbohydrate foods.

避免攝取高鈣、高鈉和精製碳水化合物。

Avoid taking excessive alcohol.
 避免攝取過量酒精。

Avoid taking high purine foods includes internal organs (brain, liver, spleen, heart)
of pig, cow, lamb and poultry, sardines, pawn, mussels, bovril, concentrated soup or
concentrated sauce, beans, asparagus, cauliflower, spinach, mushroom, deep-fat
frying foods and high lipid foods.

避免攝取高普林食物包括內臟(豬、牛、羊、家禽的腦、肝臟、脾臟、心臟)、沙甸魚、大蝦、青口、牛肉汁、濃湯或濃汁、豆類、蘆筍、椰菜花、菠菜、蘑菇、油炸食品及高脂食品。

#### References:

#### 參考資料:

1.Guideline for the management of urolithiasis

https://uroweb.org/guidelines/urolithiasis/chapter/metabolic-evaluation
-and-recurrence-prevention

2.EAU guidelines on Diagnosis and conservative management of urolithiasis, volume 69, issues 3, March 2016 https://www.europeanurology.com/article/S0302-2838(15)00699-5/fulltext

 Qualitative Review of Clinical Guidelines for Medical and Surgical Management of Urolithiasis: Consensus and Controversy 2020 https://www.auajournals.org/doi/epdf/10.1097/JU.000000000001478

## Urology Clinic - Specialist Outpatient Clinic 泌尿科專科門診

Location 位置 Clinic H, 1/F, Tower B B座1樓 – 診所H

#### Opening Hours 開放時間

 $\begin{array}{ll} \mbox{Monday-Friday} & 9:00\mbox{am} - 6:00\mbox{pm} \\ \mbox{Saturday} & 9:00\mbox{am} - 1:00\mbox{pm} \end{array}$ 

Sunday and Public Holiday Closed

 星期一至五
 上午九時至下午六時

 星期六
 上午九時至下午一時

星期日及公眾假期

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休息