

PRESS RELEASE

Nephrologists reported the world's first death case of sevelamer crystal-associated peritonitis in a peritoneal dialysis patient

(Hong Kong, 4 August 2023) – **A group of nephrologists from the United Christian Hospital reported the world's first case of sevelamer crystal deposition in the gastrointestinal tract mucosa of a patient who presented with peritoneal dialysis peritonitis, eventually resulting in fatality.**

Sevelamer is a phosphate-binding medication commonly used to treat hyperphosphatemia in patients with chronic kidney disease. Sevelamer is commonly associated with gastrointestinal side-effects including dyspepsia and flatulence. In recent years, increasing number of case series have reported the deposition of sevelamer crystals in gastrointestinal tract mucosa causing injury, mostly in patients on chronic haemodialysis.

In the current case report, a 60-year-old Chinese lady was admitted in August 2019 with fever, abdominal pain, and turbid peritoneal dialysate effluent. She had a history of end-stage renal disease and had been on continuous ambulatory peritoneal dialysis for 3 years. Her usual medication included sevelamer carbonate (1600 mg three times a day). One week after hospitalisation, her condition worsened with development of paralytic ileus. Emergency surgery was performed and a proximal descending colonic ulcer with 2 mm perforation was identified. The patient underwent a left hemicolectomy but later succumbed due to hospital-acquired pneumonia. An analysis of the colonic specimen demonstrated full thickness necrosis of the colonic wall with associated acute suppurative inflammation and peripheral ulceration. Many sevelamer crystals were found in the necrotic debris.

The case shows that although the side-effects of sevelamer are mild in most circumstances, serious gastrointestinal injury can result. As peritonitis that is common in peritoneal dialysis patients may be associated with sevelamer, the treating physician must be vigilant for potential complications of sevelamer prescribed in patients on peritoneal dialysis, especially when they have paralytic ileus.

The article "Sevelamer crystal-associated peritonitis in a patient on continuous ambulatory peritoneal dialysis: a case report" was published in the *Hong Kong Medical Journal*.
<https://doi.org/10.12809/hkmj2210076>

新聞稿

腎科醫生報告全球首宗腹膜透析病人在服用司維拉姆後併發腹膜炎並最終死亡的個案

（香港，2023年8月4日）— 基督教聯合醫院腎科團隊報告了一宗腹膜透析病人在服用司維拉姆（sevelamer）後出現腸胃道損傷和腹膜炎並最終死亡的個案，是全球首宗報告。

司維拉姆是一種磷酸鹽結合藥物，常用於治療高磷血症，副作用包括消化不良和胃氣脹等腸胃不適。近年來，越來越多醫學文獻指出司維拉姆可以形成結晶黏附在腸胃道並造成損傷，而患者大多是需要接受長期血液透析的病人。

個案中的60歲女子患有末期腎衰竭並已接受三年腹膜透析療程，2019年8月因發燒、腹痛及腹膜透析液混濁入院求診。她平常服用的藥物包括司維拉姆（磷減樂 1600 毫克，每日三次）。入院一周後，其腹膜炎仍未受控，出現腸阻塞。醫生於是為她進行緊急手術，手術時發現她的結腸有潰瘍性發炎，並有一個直徑 2 毫米的破洞。醫生為她切除左半結腸，可惜手術後情況沒有好轉，最後因院內感染肺炎離世。在病人切除了的結腸樣本中，病理科醫生發現結腸壁有化膿性感染並伴有壞死現象，同時在壞死組織中發現大量司維拉姆的結晶體。

個案顯示，雖然司維拉姆多數副作用輕微，但亦有機會造成病人腸胃嚴重損傷。由於在腹膜透析病人中常見的腹膜炎可能與服用司維拉姆有關，因此醫生需多加留意兩者的關係，並按病人情況調整司維拉姆劑量，尤其是當病人有腸阻塞時。

詳細內容可參閱原文《連續性可攜帶腹膜透析病人服用司維拉姆後併發腹膜炎的病例報告》。

###

Source: YH Wong, SM Li, Will WL Pak, et al. Sevelamer crystal-associated peritonitis in a patient on continuous ambulatory peritoneal dialysis: a case report. Hong Kong Med J 2023;29:Epub 4 Aug 2023. <https://doi.org/10.12809/hkmj2210076>.

Follow us:

