

## PRESS RELEASE

### **Underestimated power of cooked meat in affecting plasma creatinine level is likely rooted in traditional Chinese food culture, case reports show**

(Hong Kong, 8 December 2023) – **A medical team from the Hong Kong Children’s Hospital (HKCH) reported three cases on the underestimated power of cooked meat in affecting plasma creatinine level. Such cases are likely rooted in the traditional Chinese food culture of ingesting meat essence as a tonic. The case reports were recently published in the *Hong Kong Medical Journal*.**

Use of plasma creatinine as biomarker for renal function is not foolproof. Pre-analytical factors such as dietary intake of cooked meat can significantly influence plasma creatinine level, giving rise to pseudo-renal failure. A medical team from the HKCH reported three cases of paediatric oncology patients who presented with spuriously high plasma creatinine level secondary to ingestion of a large amount of cooked meat, domestically prepared in the form of essence. The plasma creatinine levels of these three patients experienced a significant increase, exceeding the upper limit of the reference level from 1.6 to 3.5 folds, all returned to normal soon after hospitalisation and further investigations did not show other evidence of renal impairment. The frequent occurrence of such practice is likely rooted in the traditional Chinese food culture of ingesting meat essence as a tonic.

The study highlights that domestic preparation of meat essence as a recurring cause of pseudo-renal failure in the local population. Medical professionals should be alert to the influence of cooked meat on plasma creatinine level. Early recognition can prevent excessive or unnecessary treatment and investigations. An alternative blood test for renal function, eg, cystatin C, should be considered in the presence of a spurious rise in plasma creatinine. Serum cystatin C test is recently available in the Chemical Pathology Laboratory in the HKCH. Parental advice to avoid excessive cooked meat intake prior to blood taking will also reduce future occurrence.

The article “The underestimated power of cooked meat in affecting plasma creatinine level: three case reports” was published in the *Hong Kong Medical Journal*.  
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## 新聞稿

### 經烹煮肉類對血漿肌酸酐水平影響被低估可能源於中國傳統飲食文化

(香港, 2023 年 12 月 8 日) — 香港兒童醫院的醫療團隊發現三宗病例, 顯示經烹煮肉類對血漿肌酸酐水平的影響被低估, 可能源於中國人攝取肉類精華作為補品的傳統飲食文化。相關報告最近見於《香港醫學雜誌》。

使用血漿肌酸酐作為腎功能的生物標記並非萬無一失。在進行分析前的因素中, 例如經飲食攝取熟肉可顯著影響血漿肌酸酐水平, 導致假性腎衰竭。香港兒童醫院的醫療團隊報告了三宗兒科腫瘤患者病例, 他們因攝入大量熟肉精華而出現血漿肌酸酐水平虛高, 超過參考範圍上限 1.6 至 3.5 倍, 但住院後的血漿肌酸酐水平很快便全部恢復正常, 進一步檢查亦沒有顯示腎功能受損的其他證據。這情況很可能源自中國人以肉類精華作補品的傳統飲食文化。

這項研究指出, 患者服食自製的肉類精華是本地人口反覆發生假性腎衰竭的原因。醫療專業人員應警惕熟肉對血漿肌酸酐水平的影響。早期識別可以防止過度或不必要的治療和檢查。當血漿肌酸酐出現虛假升高時, 應考慮其他腎功能的替代性血液檢查, 例如胱抑素 C。香港兒童醫院化學病理實驗室最近推出了血清胱抑素 C 檢測。另外, 負責研究的醫療團隊建議父母在子女抽血前避免給他們攝取過多熟肉, 以減少有關情況。

詳細內容可參閱原文《被低估的熟肉對血漿肌酸酐水平的影響：三宗病例報告》。

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