算一算："MATH+" 挽救了生命

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原文：http://www.doctoryourself.com/omns/v16n55.shtml#Ref1

The Chinese translation of this article is made possible by a generous grant from Dr. Bill Grant and from the Cheng Integrative Health.

本文翻譯工作得到 Bill Grant 博士資助及上海成氏健康資助。

(OMNS 2020 年 12 月 23 日)隨著 SARS-CoV-2 大流行進入北美，5 名經驗豐富的重癥監護醫生組成了“一線 Covid-19 重癥監護聯盟”(FLCCC 聯盟)。這個最初由危重護理醫生 Pierre Kory、G. Umberto Meduri、Jose Iglesias、Joseph Varon 和 Paul Marik 組成的工作組，過去和現在都致力於發展和完善 Covid-19 治療方案。2017 年，隨著靜脈註射羥可的松(皮質醇)、抗壞血酸(維生素 C)和硫胺素(維生素 B1)放進標準的膿毒血癥護理中，Paul Marik 博士對膿毒血癥的治療方面取得了巨大成功，包括膿毒血癥休克。這被稱為治療膿毒血癥的“HAT”理論，它是 FLCCC 聯盟抗擊 Covid-19 的起點。鑒於 Covid-19 的復雜性，“HAT”療法迅速擴充為“MATH+”，用於 Covid-19 住院患者的護理。

M＝甲基強的松龍：80mg 負荷劑量，然後 40mg/12h，至少 7 天，直到轉出 ICU

A = 抗壞血酸：3 g IV /6h，至少 7 天和/或直到轉出 ICU。

T = 硫胺素：200mg/12h 靜脈滴註，

H = 肝素（低分子量肝素）：皮下註射 1mg /Kg/12h，禁忌除外

+ = 維生素 D3，褪黑素，鋅，鎂，復合維生素 B，阿托伐他汀，法莫替丁，如有需要，可進行血漿置換治療

“如果你正在做的事情不起作用，那就改變你正在做的事情。”(Paul E. Marik 醫學博士)

早期幹預和避免機械通氣也是 2 個關鍵方面。截至 2020 年 7 月，實施 MATH+方法的兩家醫院的結果已經完成了同行評審，現在已在網上公布。他們的發現似乎是奇跡。德克薩斯州休斯頓聯合紀念醫療中心的 Joseph Varon 博士的團隊截至 7 月份治療了 140 名住院的 Covid-19 患者，存活率為 95.6%，弗吉尼亞州諾福克森塔拉諾福克綜合醫院的 Paul Marik 博士的團隊治療了 191 名住院的 Covid-19 患者，存活率為 93.9%。不同的地方是，UMMC 在急癥室開始方案，而諾福克綜合醫院在重癥監護室進行。相比之下，美國、英國和中國的其他 461 家沒有使用 MATH+方案的醫院公布的生存率從 68%到 84.4%不等。美國疾病控

製與預防中心報告稱，在 11 月的最後一周，美國有 5000 多名 Covid-19 住院患者，廣泛使用 MATH+方案可能意味著未來幾個月將增加數千名幸存者。截至 2020 年 12 月 18 日，報告使用部分或全部 MATH+方案的醫生數量已經增長到 120 多名。

本文的結論是:

"...COVID-19 中發現的多種病理生理機製可能需要多種治療藥物協同作用，以抵消這種異常免疫反應的多種有害後果。要找到一顆“靈丹妙藥”，甚至一種能在疾病的多個階段都有效的藥物，都是極其不可能的。Math+治療方案提供了一種廉價的，安全性眾所周知的藥物組合，這種基於強大的生理學原理和不斷增加的臨床證據基礎，潛在地為 COVID-19 患者的管理提供了一種挽救生命的方法。”

能在醫院裏存活下來說明治療效果不錯，但如果身體健康到不需要住院治療就更好了。FLCCC 聯盟開發了用於門診護理的 I-MASK 協議。10 月，伊維菌素藥物加入住院（MATH+）和門診（I-MASK）方案。伊維菌素是一種廉價、廣泛使用的藥物，因其抗寄生蟲作用獲得 2015 年諾貝爾生理學或醫學獎。它似乎也是一種有效的抗病毒藥物。

這項研究增加了數十份出版物的數量，包括兩項與維生素 D 有關的前瞻性隨機對照試驗，將充足的維生素 D、鋅、維生素 C 和/或硒蛋白更好的聯合起來用於對抗 Covid-19。

SARS-CoV-2 大流行的發現和警示:

1. 抗壞血酸在對抗已知和未知的傳染性病原體時是非常有效的。這一點自 20 世紀 40 年代以來就已經為人所知。Marik 博士最近的工作幫助擴大我們對抗炎和內皮細胞(血管)來自抗壞血酸和皮質醇共同增效作用起到的治療效果的理解。

a. 嚴重的 Covid-19 疾病威脅生命的三個最主要方面是高炎癥、高凝和嚴重缺氧。抗壞血酸對免疫細胞、內皮細胞和氣道組織的作用有助於緩解這三個問題。

b. 在重癥監護中，靜脈註射皮質醇和抗壞血酸可在幾分鐘內開始逆轉糖蛋白質復合物和內皮細胞損傷。

c. 定時、定量給藥維持一個穩定的狀態會更好，因為抗壞血酸的半衰期短，早期幹預效果更好，因為白細胞的激活需要依賴高水平的抗壞血酸。在生病期間，每餐服用數克，增加攝入量對抗腸道耐受性是有幫助的。生病的時候，一整天都要服用抗壞血酸，一次攝入的量遠遠不夠。

約瑟夫·瓦倫醫生已經連續工作 270 天了。他和他的團隊使用 MATH+方案，發現 95%的 Covid-19 患者都能存活。

2. 營養不是單獨起作用的;測試單一營養成分效果的觀察性和/或幹預性研究可能會忽略最佳效益和準確評估所需的混雜因素和協同增效作用。

3. 維持血液濃度 40 - 80 ng/mL 的維生素 D 水平是優化免疫健康的一個主要部分。

a. 維生素 D 是一種強大的激素，影響著 3000 多個基因的表達和功能，是先天和適應性免疫系統的主要組成部分。威爾·泰勒博士已經證明了其中的兩個基因，TRXND1 和 GCLC，在 SARS-Cov-2 感染時成為一個重要的部位。他已經證明，病毒抑製和重要的抗氧化劑、DNA 合成調節因子、鐵衰竭和內質網應激相關的基因(TXNRD1, TXNRD3, GCLC, GPX4, SELENOF, SELENOK, SELENOM, SELENOS)的表達，而維生素 D 顯著上調其中兩個基因:TXNRD1 和 GCLC 的表達。

b. 對非工業化國家健康部落人口的研究表明，血液維生素 D 水平為 40 ng/mL。

c. 1903 年，尼爾斯·裏伯格·芬森（Niels Ryberg Finsen）獲得了諾貝爾生理學和醫學獎，“以表彰他在治療疾病方面的貢獻……通過集中光輻射，他為醫學開辟了一條新途徑"。

d. 維生素 D 不足和缺乏和不斷增加的心血管病的死亡、ICU 死亡和 Covid-19 死亡的風險相關。

e. 鎂是維生素 D 代謝的重要輔助因子(也是生物活性 ATP 的重要輔助因子)。

f. 平衡 D3 與維生素 K2 的攝入對最佳的鈣代謝和分布很重要。125-250 mcg (5,000-10,000 IU) D3 與 100 mcg K2 MK7 的比值是有益的。

g. 腎臟疾病嚴重損害 D3 和硒蛋白代謝。

4. 在人類生物化學中，維生素 D 和硒的聯系非常緊密。

a. Schutze 博士等人在 1999 年發表的文章指出，需要足量的硒才能幫助維生素 D3 有效上調 TXNRD1 的表達。

b. 在人類，D3 和必需氨基酸硒半胱氨酸都必須有足夠的量才能有效地產生幾種硒蛋白。

c. 研究表明，與單獨補充 D3 相比，共同補充 D3 和 L-半胱氨酸可改善 GSH、CYP24A1 和維生素 D 調節基因的狀態，包括上調 PGC -1α、NRF2 和 GLUT-4 基因表達。

d. 反過來，谷胱甘肽增加了維生素 D 的循環，增強了維生素 D 的作用。

5. 維生素 D 和硒蛋白是免疫記憶細胞的形成和維持所必需的。不足不僅會增加感染性疾病的風險，也會影響對感染適應性免疫的長久益處。這也可能暗示了對疫苗接種成功的可能性。

6. 在一般人群中，硒濃度為 70 - 150 ng/mL 時可以表現出好的健康狀況。血中硒蛋白 P 水平為 4.3 +/- 1.0 mg/L 時有助於 Covid-19 患者預後的改善;將 Zn 和 SELENOP 維持在參考範圍內顯示生存率高。

7. 微生物理論是有幫助的，但宿主體質仍然是很重要的。營養不足仍然是全球和國家公共衛生的頭號敵人。

a. 宿主因素影響許多病毒的致病性。許多影響宿主的因素是可以改變的，並且與營養有關。

b. 當一些病毒在營養不良的環境中復製時，特別是在缺乏硒的環境中，它們會變異成更有害的毒株。“次級營養不良”是一個未受重視的概念。只要人們營養不良，就有可能繼續出現更致命的毒株，而這又使營養不良的人面臨病毒突變的風險。

c. 對抗感染會大大增加人體的代謝需求。病毒也需要營養;宿主營養和必需蛋白質的竊取和/或破壞進一步影響了人們為消除感染，恢復健康所需要的額外營養。

d.

(Michael Passwater 是美國臨床病理學協會認證的醫學技術專家，免疫血液學專家，實驗室管理文憑。他在臨床實驗室工作了 28 年，獲得了特拉華大學醫學技術學士學位。作為理查德·帕斯沃特（Richard Passwater) 博士的兒子，他從出生前就開始服用維生素 C 和其他營養補充劑。)

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