

Editorial Article

It's Time to Revisit

Naved Y Hasan MD*

***Corresponding Author: Naved Y Hasan**, American Board of Internal Medicine, Pulmonary and Critical Care Consultant, Department of Intensive Care, King Abdullah Medical City, Makkah, Saudi Arabia.

Received Date: April 21, 2021

Publication Date: May 01, 2021

The refeeding syndrome has been known to humanity since the 5th Century BC, vaguely described by Hippocrates. It was further mentioned by Flavius Josephus in the 1st Century in people during the siege of Jerusalem. In modern history, it was further identified during World War II (1).

In this era of raging SARS-CoV-2, a growing number of patients are getting admitted to the hospital, especially in Intensive Care Units. There is a tendency to treat critically ill patients with a standard diet or overfeeding. There is always a question a physician should ask... "Is the more the better". This concept does not apply in many scenarios in the critical care areas, including the nutritional support provided to our patients. The reason behind this lack of focus on this potentially life-threatening but overlooked condition is multifactorial. The most important factor is the lack of awareness among many hospital staff (1). The other factors are the nonspecific clinical and laboratory features to diagnose the condition. Therefore, it is prudent to identify the patients who are at the highest risk at the time of admission. These may include patients with warning signs like significant weight loss of over 10 percent in 1-3 months preceding admission and those with zero-calorie intake over the last 7-10 days preceding admission. Those with low body weight less than 70-80 percent of ideal body weight and look emaciated and those who have chronic underlying diseases like active malignancy, COPD and HIV, etc. are at the highest risk (2). All clinicians treating the vulnerable groups should recognize the risks and their consequences, including electrolytic disturbances, especially hypophosphatemia (3,4). Impairment of cardiorespiratory function, seizures, and even death can occur. There are several studies done and many guidelines and recommendations proposed by the American Society for Parenteral and Enteral Nutrition (ASPEN), National Institute of Care and Excellence (NICE) (5), and Friedli, but there is a lack of major randomized control trials in this category of patients (6). So further research may be helpful.



Our aim should be to recognize the onset of refeeding syndrome, and consider applying the relatively new concepts of “permissive underfeeding” or “hypocaloric feeding” especially in the critically ill patients from the start of the patient care and gradually increase the calorie intake over the initial few days, while monitoring the electrolytes, to prevent the risks (7).

Are we ready to adopt the old saying “Let food be thy medicine”?

Refeeding Syndrome Timeline

Monitor: Bodyweight and Fluid balance

Vital signs, Clinical examination

Labs: sodium, potassium, magnesium, calcium, phosphate, glucose, urea, creatinine



Figure 1

Author contributions: Searched the literature, wrote the Editorial, and designed it for submission.

Abbreviations: None

Disclosures: The author declares no funding received from any source.



The author declares no conflict of interest.

References

- 1.Mehanna H, Nankivell PC, Moledina J, Travis J. “Refeeding syndrome—awareness, prevention and management”. *Head and Neck Oncology*. 2009;1(1): p.4.
- 2.Mehanna HM, Moledina J, Travis J. “Refeeding syndrome: what it is, and how to prevent and treat it”. *BMJ*. 2008;336(7659):1495–1498.
- 3.Hoffmann M, Zemlin AE, Meyer WP, Erasmus RT. “Hypophosphatasemia at a large academic hospital in South Africa”. *Journal of Clinical Pathology*. 2008;61(10):1104– 1107.
- 4.Tresley J, Sheean PM. “Refeeding syndrome: recognition is the key to prevention and management. *Journal of the American Dietetic Association*”. 2008;108(12):2105– 2108.
5. “Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition” [Internet]. *Nat Collab Centre Acute Care* 2006; [cited November 3, 2019]. Available from: nice.org.uk/guidance/cg32.
- 6.Friedli N, Stanga Z, Sobotka L, et al. “Revisiting the refeeding syndrome: results of a systematic review”. *Nutrition*. 2017; 34:151–160
- 7.Gariballa S. “Refeeding syndrome: a potentially fatal condition but remains underdiagnosed and undertreated”. *Nutrition*. 2008 Jun;24(6):604-6. doi: 10.1016/j.nut.2008.01.053. Epub 2008 Mar 24. Erratum in: *Nutrition*. 2009 Jun;25(6):667. PMID: 18359196.

Volume 2 Issue 5 May 2021

©All rights reserved by Naved Y Hasan.