

Refeeding syndrome: Rx

Definition: refeeding syndrome is defined as the clinical complications that occur as a result of fluid and electrolyte shifts during nutritional rehabilitation of malnourished patients:

- Hypophosphatemia (hallmark and predominant cause)
- Hypokalemia
- Vitamin (eg, thiamine) deficiencies
- Congestive heart failure
- Peripheral edema

Pearl: Most fatalities that occur because of the syndrome are due to cardiac complications (induced by hypophosphatemia), including impaired contractility, decreased stroke volume, heart failure, and arrhythmias. Seizures can also occur

Rx: Reduce nutritional support and correct hypophosphatemia, hypokalemia, and hypomagnesemia. Moderately to severely ill patients with marked edema or a serum phosphorous <2 mg/dL should be hospitalized to intravenously correct electrolyte deficiencies and for close monitoring. Continuous telemetry may be needed to monitor cardiopulmonary physiology. **Refeeding syndrome can nearly always be avoided by limiting the amount of calories and fluid provided in the early stages of refeeding,** avoiding rapid increases in the amount of daily calories ingested, and closely monitoring the patient during the first few weeks of the refeeding process

Question:

A 31 year-old male is admitted with phosphate level of 0.8 mg/dL. He looks cachectic and an S3 is heard on physical exam. The best approach is to:

- a. Calculate caloric intake based on indirect calorimetry
- b. Limit caloric intake
- c. Carefully titrate diuretics to improve hemodynamics
- d. Inotropic support

Answer: B – Reduce nutritional support and correct hypophosphatemia, hypokalemia, and hypomagnesemia.