Response to Letter re: Refeeding Syndrome in Adults Receiving Total Parenteral Nutrition: An Audit of Practice at a Tertiary UK Centre

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Dear Editor,

We thank Wong and Lew [1] for their insightful comments. Refeeding syndrome (RFS) is a condition where definitions are highly heterogeneous among studies with some studies relying only on electrolyte disturbances with different cut-offs, and others also integrating clinical parameters into the definition [2]. These varying cut-offs alongside varying definitions produce an heterogeneous incidence of RFS [3]. Hypophosphatemia has been commonly used for defining RFS, which is arguably a broader syndrome that includes electrolyte abnormalities in addition to clinical symptoms [2].

In our paper [4], we explored hypophosphatemia (with cut-offs from Ahmed et al. [5]), alongside other electrolyte abnormalities, in low and high risk RFS syndrome patients receiving total parenteral nutrition, as defined by the National Institute for Health and Care Excellence guidelines [6]. Hypophosphatemia was not used as the sole defining criterion for RFS.

According to the definition suggested by Wong and Lew [1] of having serum phosphate level reduced by more than 0.16 mmol/L to below 0.65 mmol/L after initiating nutrition support, six patients (7.5%) experienced RFS by 72 hours and ten patients (12.5%) experienced RFS by 168 hours. When examining hypophosphatemia with the cut-offs suggested by Wong and Lew [1], distribution is not very dissimilar to the classification we followed (Table 1), with the new hypophosphatemia incidence being 20.0%, which is expected by a decreased lower normal cut-off of 0.71 mmol/L compared to our 0.85 mmol/L. Finally, the complications suggested by Wong and Lew [1] were not analysed as part of the present study. The present study examined abnormalities in terms of metabolic measurements and not clinical signs.

Table 1. Phosphate level distribution with cut-offs suggested by Wong and Lew [1].

	Low risk RFS (n=20)	High risk RFS (n=60)	Total (n=80)
Phosphate plasma levels			
Normal/High (> 0.71 mmol/L)	20 (100.0%)	44 (73.3%)	64 (80.0%)
Hypophosphatemia	0 (0.0%)	16 (26.7%)	16 (20.0%)
Mild (0.55-0.71 mmol/L)	0 (0.0%)	9 (15.0%)	9 (11.3%)
Moderate (0.32-0.54 mmol/L)	0 (0.0%)	6 (10.0%)	6 (7.5%)
Severe (< 0.32 mmol/L)	0 (0.0%)	1 (1.7%)	1 (1.2%)

References

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