What do we know about micronutrients in critically ill patients – a narrative review, Intensive Care Medicine

Authors

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Search strategy

The Central Cochrane Registry of clinical trials, and the PubMed database were used to search relevant articles on humans. A MeSH search with keywords was performed in the above databases. The MeSH terms included the separate names of the micronutrients e.g.: "vitamin A" or "retinol", "vitamin B1" or "thiamine", "vitamin B2" or "riboflavin", "vitamin B3" or "niacin" or "nicotinic acid" or "nicotinamide", "vitamin B6" or "pyridoxine" or "pyridoxal" or "pyridoxamine", "vitamin B9" or "folic acid", "vitamin C" "ascorbic" or "ascorbate", "vitamin D" or "calciferol" or "cholecalciferol" or "1,25-dihydroxycholecalciferol", "vitamin E" or "tocopherol" or "alpha-tocopherol", "selenium" or "selenious acid" or "sodium selenite", "zinc", "iron" or "ferrous" or "ferric", "copper", "carnitine" or "L-carnitine" combined with either "critical illness" or "critically ill" or "intensive care" or "ICU". The general search results were further filtered stratified with the terms of limitations related to study methodology e.g.: "interventional studies", "prospective observational studies", "retrospective observational studies" and "clinical trials". All the pediatric studies and studies related to surgical-only patients were excluded. The included articles were studied to identify any missing studies.