

Introduction

Starved, critically ill patients generally became malnourished much more rapidly than do normal fasting humans. Recognition of this phenomenon and of the relationship between nutritional status and certain host defenses has led many physicians to conclude that early nutritional intervention may favourably influence the course of a critical illness. It has generally been assumed that nutritional therapy may influence the clinical course by affecting the rate of protein loss and therefore the strength of endogenous host defense (*Robert Scblichtig et al., 1986*).

The acceleration of protein catabolism appear to have the most marked influence on survival. When the protein host defenses become depleted, the patient may become more vulnerable to the additional insults that are usually unavoidable during a prolonged ICU stay. Noxious stimuli include bacteria and fungi introduced by invasive devices, intravascular volume overload and consumption of clotting factors; these stimuli challenge the integrity of immune barrier, haemodynamic and respiratory reserves and hepatic synthetic capacity, respectively. The previous factors are of course central to nutritional monitoring and assessment. The aim of the work is to study which nutritional dependent parameter we should follow and attempt to modulate and which aspects of nutritional status are associated with the survival of critically ill patient.

This subject will be discussed under the following items :

1. Nutritional requirements for different groups.
2. Body fluids and electrolytes distribution and requirements.
3. Protein metabolism during starvation and illness.

4. Selection of patient in need for nutritional support and timing of nutritional intervention.
5. Organization of nutritional devices.
6. Monitoring of nutritional support.