

Anorexia Nervosa, Albumin, and Inflammation

To the Editor:

We read with interest the recent article by Eckart et al¹ regarding the relationship of nutritional status, albumin, and inflammation during illness. It is worth noting, however, that their observations, surprisingly, do not apply to patients with severe anorexia nervosa, notwithstanding the marked cachexia and underweight status of patients suffering with anorexia nervosa.

Our ACUTE Unit at Denver Health singularly cares for and medically stabilizes adult patients with extreme forms of anorexia nervosa who have body mass indices (BMIs) between 6 and 13, before they are then able to transition to traditional residential eating disorder programs across the United States. Of note, the admission serum albumin levels in these patients are typically normal.² Uninformed clinicians often incorrectly assume that these patients are not critically ill because their albumin levels are normal. Indeed, Eckart's study¹ clearly points out that it is the concomitant inflammation that drives the serum albumin level to low levels; this state of inflammation is overall absent in anorexia nervosa. Therefore, serum albumin levels are preserved even in patients with single-digit BMIs, and it is therefore not a good marker of the severity of the anorexia nervosa. Rather prealbumin maybe a better serum marker of the severity of anorexia nervosa³ because it falls in concert with lowering of the BMI because of due to the self-imposed starvation that defines anorexia nervosa.

Typically, patients with anorexia nervosa suffer from starvation-related malnutrition, which is defined as chronic starvation without inflammation. Notwithstanding normal

albumin levels, these patients with anorexia nervosa require an increased amount of protein and overall calories to meet their nutritional needs appropriately and restore weight, due to being in a hypermetabolic state as refeeding progresses. Even when normal albumin levels are observed throughout the refeeding process, many patients with anorexia nervosa still meet criteria for malnutrition given their poor nutrient intake, rate of weight loss, subcutaneous fat and muscle wasting, as well as other physical assessment criteria.⁴ Therefore, overall nutritional status and needs cannot be accurately assessed using serum albumin levels in patients with anorexia nervosa because of the multitude of factors that contribute to their disease state and their degree of malnutrition.

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