CORRESPONDENCE

Stress dose steroids—take another look at the literature

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To the Editor,

Once again, a debate surrounding “stress dose steroids” has re-emerged¹ emphasizing the lack of robust data despite several reviews. Being personally involved in some of the original research addressing potential secondary adrenal insufficiency in glucocorticoid-treated surgical patients, I am a little surprised that the discussion is never based on the (admittedly) old physiologic data that provided a rational treatment regimen based on both physiologic steroid levels and those measured in normal patients undergoing minor and major surgery.² Such steroid supplementation proposals were based on detailed isotopic cortisol turnover studies in major surgery³ showing that approximately 150 mg of cortisol was secreted during these major procedures thus providing a physiologic basis for how to supplement. Furthermore, the proposed regimen was supported by detailed repeated blood sample measurements in adrenalectomized patients.⁴

This area of research started with case reports of acute secondary adrenocortical insufficiency in surgical patients on glucocorticoid therapy; however, more detailed studies almost 50 years ago showed that this was very rare, despite partial cortisol deficiency.⁵

In summary, the discussion as to how to supplement using physiologic cortisol administration in surgical stress situations in patients with partial or total adrenal insufficiency should be argued based on these past

detailed studies. This can lead to recommendations based on physiologic dosing regimens that are both simple and safe.

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