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Consumer Medicine Information (CMI) for glucocorticoid replacement medications one year on: unsafe errors persist.

About one year ago, local medical (1) and pharmaceutical (2) publications drew attention to errors in Australian Consumer Medicine Information (CMI) for the standard glucocorticoid replacement medications, cortisone acetate (Cortate) and hydrocortisone (Hysone). The CMI advice “Do not take Cortate if you have an uncontrolled infection” or “Do not take Hysone if you have any infections that are not being treated or are not responding to treatment” is dangerously incorrect (1,2). If followed, such advice could lead to life-threatening consequences within 24-36 hours for some thousands of Australians who depend on glucocorticoid replacement. These texts contradicted standard clinical advice that patients with Addison’s disease, hypopituitarism or congenital adrenal hyperplasia, or those who have had bilateral adrenalectomy, make self-initiated, short-term 2-3 fold increases in their replacement glucocorticoid dosage (Cortate, Hysone, or prednisolone) at the time of acute intercurrent illness or infection (3). Such increases are crucial to replicate the normal glucocorticoid response to stress (3), as endorsed in the Australian Medicines Handbook (4), which states: “usual contraindications to systemic glucocorticoids do not apply when used for replacement therapy” and offers the advice that “In mild infection, a doubling or tripling of glucocorticoid maintenance dosage may be appropriate”.

In April-May 2008 we have reviewed information on Cortate and Hysone in three standard on-line CMI sources, www.mydr.com.au www.nps.org.au and www.appgonline.com.au to assess progress since these serious CMI errors were

pointed out a year ago. The suggestion to omit Hysone in the face of infection has been deleted since updating of the www.mydr.com.au source in November 2007, but there is no suggestion that increased dosage may be appropriate. However, that source still recommends cessation of Cortate in the face of infection, in an entry dated February 2002. The www.nps.org.au source also deleted the suggestion to cease Hysone in the face of infection in a revision of November 2007, again without mention of the need for dosage increase. Notably, there is currently no on-line CMI for Cortate on this site. A third source, www.appgonline.com.au that perpetuated erroneous advice for both medications until April 2008, in entries last updated over 7 years ago, has now withdrawn its on-line CMI. Unsafe, recently-deleted CMI documents could still be in use.

Since January 2003, CMI has been mandatory for all prescription medicines in Australia (5); it is self-evident that flawed CMI could do more harm than good, if consumers were misled by it, rather than relying on advice from appropriately trained health professionals. It is stated and widely accepted that "all CMIs must be based on and consistent with the Product Information (PI)…" (5), a nexus that should serve as a safeguard, provided PI is valid. The CMI texts assessed here, presented without traceable professional accountability, are at odds with PI sanctioned by the Therapeutic Goods Administration. For example, PI for hydrocortisone has advised, at least since 1997, that "during stress (surgery, infection, trauma) it may be necessary to increase dosage temporarily" and that "dosage of hydrocortisone should be increased during periods of intercurrent illness or surgery to about 100-150mg/day." We conclude that current CMI sources for standard glucocorticoid replacement medications are inconsistent with one another, out-of-line with clinical practice, and at odds with glucocorticoid PI and recommendations in the Australian Medicines Handbook.

What are the consequences of these discrepancies? First, pharmacists cannot be secure about the safety or consistency of CMI that they may distribute on the critical issue of glucocorticoid replacement. Second, consumers cannot be confident about the CMI that they obtain from officially-sanctioned electronic sources. Third, this issue emphasizes the importance of educating patients with critical replacement needs about the management of their condition, in particular, emergency care. Fourth, it remains uncertain whether the shortcomings identified here apply only to glucocorticoid replacement medications, or whether the problem is more widespread. Finally, there is clearly a need to establish a reliable process to achieve safe, up-to-date, *uniform* CMI that is in line with standard medical practice and current regulations on the content of CMI (5), concordant with PI of acceptable quality.

A key to effective PI and CMI for glucocorticoids is an understanding of the distinction between replacement dosage (prednisolone 5-7.5 mg, hydrocortisone 20-30 mg, cortisone acetate 25-37.5mg daily), and the much higher doses that may be used for anti-inflammatory or immunosuppressive effect. Current Australian CMI lacks this crucial clinical perspective. While there is no doubt that caution with the higher anti-inflammatory or immunosuppressive dosage schedules is important in the face of infection, it is unsafe and incompetent to represent that concern to the disadvantage of those who take glucocorticoids in replacement dosage.

References:

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