ADVERSE EFFECTS OF LONG-TERM GLUCOCORTICOID USE: A STUDY OF PREVALENCE AND MONITORING PRACTICE

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Background: Glucocorticoids (GCs) continue to be integral in the treatment of several rheumatic conditions and concerns over adverse effects (AEs) from prolonged GC exposure are certainly at the forefront of physician’s and patient’s minds. There is a deficiency in studies clarifying prevalence rates of the various AEs, particularly ones which do not lead to hospitalization or require specific treatment. To establish a consensus on monitoring practices, EULAR published recommendations in 2010 for the monitoring of AEs to be used in daily practice. Our group conducted a survey to assess prevalence rates of AEs associated with GCs and audited monitoring practice according to EULAR recommendations.

Methods: Our study was conducted in the rheumatology department of the Cardiff & Vale University Health Board, between May and June 2013. Patients included were those who had been on GCs for >3 months. Assessment of monitoring compliance (measurements of blood pressure, fasting glucose, weight & height (to calculate BMI), bone densitometry) and occurrence of AEs was made through a combination of a pre-outpatient appointment interview and perusal of patient records. Appropriate monitoring was defined as patients who were assessed for all EULAR parameters. Additionally, we assessed patient’s perceptions of how well they felt AEs were explained to them prior to commencing treatment.

Results: Information was collected on 134 patients; mean prednisolone dose ~9mg daily. The most common AEs reported were weight gain (68.7%), ankle oedema (35.8%) and osteoporosis (20.9%). Several also reported eye problems including cataracts and glaucoma (16.4%). Aside from weight gain, over 40% had >1 additional cardiovascular risk factor. Only 4.5% of patients were appropriately monitored according to EULAR recommendations and 5.2% had no monitoring at all. About 50% of patients had timely densitometry assessments. The poorly measured parameters were mainly blood glucose at 27.6% and heights 32%. Two thirds of patients had regular blood pressure checks. Majority of patients (90%) felt GC related AEs were explained to them prior to treatment commencement. Only approximately a third recollected being provided a steroid information leaflet.

Conclusion: Weight gain, cardiovascular risk and osteoporosis were the most prevalent AEs reported which likely reflects the rationale behind the EULAR monitoring recommendations. Compliance with EULAR recommendations for monitoring these key AEs was inconsistent and somewhat haphazard. The clearest pitfall was blood glucose monitoring. To ensure consistency in practice, we suggested a protocol to be developed, mirroring the EULAR recommendations, to be kept in all outpatients rooms as a prompter for clinicians. There is also a clear need for better communication with primary care to promote monitoring practices. Patients are expecting better dissemination of knowledge regarding the drugs they are prescribed; aside from the obligation of physicians to ensure this, better provision of information leaflets and online resources are vital.

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