2.08 Steroid Prescribing Practices in Acute COPD Exacerbations– An Audit of a Level 3 Irish Hospital

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Background: Glucocorticoid prescription improves lung function and recovery time in acute COPD exacerbations (1). Guidelines suggest 5-day treatment with systemic glucocorticoids is non-inferior to longer durations, and treatment with oral prednisolone versus intravenous administration is equally effective (1,2).

Methods: We conducted a retrospective chart review assessing all patients in Wexford General Hospital admitted with acute COPD exacerbations between January and February 2023 to analyse concordance with these recommendations.

Results: Of the 38 patients admitted, 20 (52.6%) received oral prednisolone. The duration of treatment ranged between 2 and 14 days. Only 7 (35%) received the recommended 5 days of treatment. 13 patients (34.2%) were prescribed intravenous hydrocortisone - duration varied between 2 and 9 days. Only 1 patient had a documented swallowing hazard as their indication for intravenous versus oral steroid treatment. 22 patients (57.8%) patients received a stat dose of intravenous hydrocortisone in the Emergency Department.

Conclusions: Steroid prescription was highly variable between clinicians in our centre with regards to both route of steroid administration and duration of treatment. Consideration should be given to the development of hospital guidelines and improved staff awareness on appropriate steroid prescribing to reduce the burden of longer glucocorticoid exposure.

Conflict of Interest: The authors declare that they have no conflict of interest.

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Types of steroids	Duration (days)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Prednisolone 30mg	0	0	0	1	6	1	0	2	0	2	0	0	1	0	13
Prednisolone 40mg	0	2	0	2	1	0	2	0	0	0	0	0	0	0	7
IV hydrocortisone	0	3	1	0	1	3	2	0	1	0	0	0	0	1	12
No regular steroids		1								1	1	1			4
Combination prednisolone / hydrocortisone	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
															38

 Table 1: Types, doses, and route of steroids prescribed as inpatient until discharge.

Doses and frequency of hydrocortisone	Number of patients					
IV Hydrocortisone 100mg OD	1					
IV Hydrocortisone 100mg BD	1					
IV Hydrocortisone 100mg TDS	5					
IV Hydrocortisone 100mg QDS	7					
Total	14					

 Table 2: Doses and frequency of hydrocortisone prescribed as inpatient