Corticosteroid Stewardship

Date: August 18, 2022

Subject: Corticosteroid (CS) Stewardship Best Practices

Patient Population: Adults and children

Rationale: Steroid stewardship is needed in all clinical settings, including urgent care. It is acknowledged that corticosteroids can be a critical tool in the management of both acute and chronic conditions. The focus of this stewardship statement is to create awareness amongst clinicians regarding CS usage, encourage a stewardship approach, and to educate patients on the risks and benefits of their use and overuse.

Introduction: Steroid stewardship is the systematic effort to administer or prescribe glucocorticoids in a rational, evidence-based manner, balancing any benefits and the potential risks. There is evidence that even a short course of CS increases the risk of fracture, blood clots, GI bleeding, mood changes, sleep disturbances, heart failure, and sepsis. Long term or repeated use of CS can result in adrenal insufficiency and/or adrenal crisis. These risks may be present with a lifetime cumulative dose of steroids with a lower threshold than might be expected.

Significant drug interactions exist that impact how steroids and medications are metabolized, either increasing or decreasing the effect of CS and/or medications. CS are frequently involved in malpractice claims which can lead to costly payments and may result in a report to the National Practitioners Data Bank (NPDB).

Discussion: There is evidence that patients benefit from the proper utilization of CS and that they can potentially suffer serious consequences for using CS even when indicated.

Corticosteroid stewardship recognizes physicians’ and advanced practice providers' responsibility to practice evidence-based medicine. Clinicians must assess the need for systemic CS in each individual patient, balancing benefit versus risk of harm. Clinicians have the responsibility to educate patients on the risk and benefits of CS based on the patient’s condition and individual health status including adverse drug reactions and drug interactions.

Major drivers for the inappropriate use of CS include clinicians’ lack of understanding of the risks of even short-course steroids, the appropriate and inappropriate indications for systemic CS, and patient expectations.

Strategies to assist clinicians with steroid stewardship:
• Healthcare organizations should develop their own CS stewardship statement and/or policies and procedures
• Each organization and clinician should strive to use the lowest effective dose for the shortest effective duration to manage the acute medical problem
• To support the CS statement, organizations should develop a system to monitor CS utilization among clinicians and then to provide coaching as necessary to comply with the CS stewardship statement and evidence-based medicine
• Clinicians should be encouraged to provide information to patients on the risks and benefits of steroid use and to document that discussion in the medical record
• Some healthcare organizations may even consider requiring clinicians to have patients sign an informed consent, as is customary with steroid epidural or joint injections
• Clinicians are asked to consider CS sparing treatment options when CS use is not supported by guidelines

Summary

Just as antibiotic stewardship is a clinician’s responsibility, so is CS stewardship. A change in CS prescribing practices will require ongoing education and involve extra effort and time spent with patients. Clinicians are encouraged to stay current on the appropriate use of CS and the potential risks of overuse and misuse. Medical providers should have a conversation with each patient to explain the decision to recommend CS for a specific diagnosis. Clinicians should include documentation in the medical record of the discussion with the patient on the risks and benefits of corticosteroids.
<table>
<thead>
<tr>
<th>Proven Benefit to Balance Any Harm</th>
<th>May be beneficial depending on clinical situation</th>
<th>Potential Harm &gt; Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell’s Palsy, including Ramsay-Hunt Syndrome</td>
<td>Severe or significant contact dermatitis where topical steroids may be insufficient or contraindicated*</td>
<td>Symptom relief in URI, RTI, cough</td>
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<tr>
<td>Flares of diagnosed rheumatologic conditions</td>
<td>Pericarditis</td>
<td>Pneumonia</td>
</tr>
<tr>
<td>Asthma exacerbations</td>
<td>Gout</td>
<td>“Pick me up”</td>
</tr>
<tr>
<td>Significant COPD exacerbations</td>
<td>Pharyngitis with severe pain, swelling</td>
<td>Allergic or other rhinitis</td>
</tr>
<tr>
<td>Croup</td>
<td>Urticaria/angioedema</td>
<td>Sinusitis</td>
</tr>
<tr>
<td>Presumptive diagnosis of polymyalgia rheumatica, pending confirmation</td>
<td>Anaphylaxis</td>
<td>Otitis media</td>
</tr>
<tr>
<td>Presumptive diagnosis of temporal arteritis, pending confirmation</td>
<td></td>
<td>Varicella zoster (shingles), except Ramsay-Hunt</td>
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</tbody>
</table>

*Consider systemic steroids if rash involves > 20% of the body, or on areas sensitive to more than low-potency steroids, such as genital area or face

REFERENCES

Corticosteroid Stewardship - Background

Provider Perceptions on Steroid Dosing in AECOPD; Laying the Groundwork for Steroid Stewardship


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Short-term Corticosteroids and Avascular Necrosis: Medical and Legal Realities


Early Use of Corticosteroid May Prolong SARS-CoV-2 Shedding in Non-Intensive Care Unit Patients with COVID-19 Pneumonia: A Multicenter, Single-Blind, Randomized Control Trial

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Short term use of oral corticosteroids and related harms among adults in the United States: population-based cohort study


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**Corticosteroid Stewardship – Specific Medical Conditions**

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Exogenous steroids treatment in adults. Adrenal insufficiency and adrenal crisis-who is at risk and how should they be managed safely https://www.endocrinology.org/media/4091/spssfe_supporting_sec_-final_10032021-1.pdf

4 Common Side Effects of Inhaled Steroids https://www.verywellhealth.com/side-effects-of-inhaled-steroids-83086


**Steroid Statements**


**Medicolegal Considerations**

