

The use of subcutaneous Levetiracetam in Palliative medicine – Quick Guide

Indication	The treatment of epileptic seizures in palliative care patients who are unable to take their medications orally and when IV access is not an appropriate intervention.																				
Dose conversion	The oral bioavailability of levetiracetam is 95-100% so an oral to subcutaneous conversion is a 1:1 ratio																				
Doses	<p>If a patient is already using levetiracetam the starting subcutaneous dose should be the same as the previously administered total daily dosage.</p> <p>The usual starting dose in a patient not previously using levetiracetam is 500-1000mg over 24 hours via CSCI</p> <p>The oral formulation states a dose increase of 500mg at two week intervals. Patient condition should be considered when deciding on a titration schedule in this patient group.</p> <p>The maximum licensed dose is 3000mg. Higher doses (up to 4000mg) have been stated in the literature. Please contact pharmacy for advice.</p>																				
Diluents	It can be used with both water for injection and 0.9% sodium Chloride. Levetiracetam solution for injection should be diluted as much as is practical to avoid site irritation.																				
Rate of Infusion	Levetiracetam can be infused via CSCI over 24 hours. It can also be run in two 12 hour drivers if the solution volume is large.																				
Compatibility information	There is low level evidence to suggest that certain medications can be combined without compatibility problems. However, it is advised that levetiracetam should not be mixed in a syringe with other medications. Please contact pharmacy for further advice.																				
Cautions	<p>Patients with renal or severe hepatic impairment may need dose adjustments</p> <table><tr><td>Group</td><td>Creatinine clearance (ml/min/1.73m2)</td><td>Dose and frequency</td></tr><tr><td>Normal</td><td>>80</td><td>500 to 1500mg twice daily</td></tr><tr><td>Mild</td><td>50-79</td><td>500 to 1000mg twice daily</td></tr><tr><td>Moderate</td><td>30-49</td><td>250 to 750mg twice daily</td></tr><tr><td>Severe</td><td><30</td><td>250 to 500mg twice daily</td></tr><tr><td>Dialysis</td><td></td><td>500 to 1000mg once daily</td></tr></table>			Group	Creatinine clearance (ml/min/1.73m2)	Dose and frequency	Normal	>80	500 to 1500mg twice daily	Mild	50-79	500 to 1000mg twice daily	Moderate	30-49	250 to 750mg twice daily	Severe	<30	250 to 500mg twice daily	Dialysis		500 to 1000mg once daily
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