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SAFER USE OF HIGH RISK MEDICINES

Waitemata District Health Board
Best Care for Everyone

LAMOTRIGINE - SAFE PRESCRIBING - DOES THE DOSE FIT

- START LOW AND GO SLOW TO AVOID SEVERE ADVERSE EFFECTS
- REGULAR BLOOD TESTING IS NOT NECESSARY
- REDUCE DOSE WHEN IN COMBINATION WITH SODIUM VALPROATE
- DOSE ADJUSTMENT IS REQUIRED WITH COMBINED ORAL CONTRACEPTIVES
- ROUTINELY ASSESS FOR ANXIETY, DEPRESSION AND SUICIDALITY

Lamotrigine is an antiepileptic medicine, which can also be used to prevent depressive episodes associated with bipolar disorder. Lamotrigine can also be useful for rapid cycling of mood or mixed episodes of bipolar disorder, usually in combination with other medicines.

START LOW AND GO SLOW TO AVOID SEVERE ADVERSE EFFECTS

When starting lamotrigine it is advisable to start low and go slow. High initial doses or rapid dose escalation increases the risk of potentially severe adverse effects.

Skin reactions

Adverse skin reactions are most likely to occur within the first 8 weeks of starting lamotrigine. Although often mild they can progress to severe and potentially fatal conditions, including Stevens Johnson syndrome and toxic epidermal necrolysis.

Inform patients to seek medical advice if rash appears, especially if it occurs within the first 8 weeks of treatment.

If a rash develops, discontinue lamotrigine unless the rash is clearly not drug-related. If lamotrigine is being used for epilepsy, manage discontinuation with a specialist to reduce the risk of rebound seizures. For other conditions, lamotrigine may be withdrawn without a step-wise reduction of dose.

Anticonvulsant Hypersensitivity Syndrome

Lamotrigine has been associated with the rare but potentially severe anticonvulsant hypersensitivity syndrome (AHS). This usually presents as a high spiking fever, rash and/or hepatitis. Advise patients to seek medical advice immediately and discontinue lamotrigine as above.

Note: If lamotrigine has been stopped for 5 days or more, re-titrate the dose to avoid serious skin reactions. See the data sheet for specific information.

REGULAR BLOOD TESTING IS NOT NECESSARY

Routine monitoring of serum lamotrigine and liver function is not considered necessary. Rarely, elevated transaminases can occur (in less than 1 in 1000 patients). Hepatic dysfunction usually occurs in association with hypersensitivity reactions, so if there are abnormal blood levels, check for other signs of hypersensitivity.

Note: Dizziness, blurred vision and headache can occur when initiating lamotrigine, especially if the dose is escalated too quickly or if other medicines are prescribed that affect its metabolism. If carbamazepine is also prescribed, the dose of carbamazepine may need to be reduced.

REDUCE DOSE WHEN IN COMBINATION WITH SODIUM VALPROATE

Sodium valproate **inhibits** the metabolism of lamotrigine, increasing the risk of toxicity. The risk is further increased if the recommended starting dose, or the rate of dose escalation is exceeded. Adhere to the dosing guidelines in the New Zealand Formulary when starting or stopping lamotrigine or sodium valproate.

Other antiepileptic medicines such as phenytoin, carbamazepine, phenobarbitone and primidone, **induce** the metabolism of lamotrigine and can lead to subtherapeutic levels. Adhere closely to dosing guidelines in the datasheet to ensure therapeutic effect is achieved without risking toxicity.

DOSE ADJUSTMENT IS REQUIRED WITH COMBINED ORAL CONTRACEPTIVES

The combined oral contraceptive (COC) ethinylestradiol/levonorgestrel induces the metabolism of lamotrigine. If starting a COC, the maintenance dose of lamotrigine will need to be gradually increased. See the data sheet for specific information.

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LAMOTRIGINE

Conversely if stopping a COC for a patient established on lamotrigine, the dose of lamotrigine will need to be gradually reduced.

There is currently no evidence to suggest that progestogen-only contraceptive methods affect lamotrigine but there is a theoretical interaction with lamotrigine and hormone replacement therapy; the dose of lamotrigine may need to be increased.

Note: If hormonal contraceptives are already being taken, and lamotrigine is being initiated, no adjustments are necessary.

Pregnancy

Lamotrigine is currently classified as a category D; effective contraception is recommended when lamotrigine is prescribed to females of childbearing age.

There have been some reports of oral clefts when lamotrigine is taken during the first trimester in doses over 200mg per day, but other sources have not shown evidence of increased teratogenic risk.

Lamotrigine is known to deplete folate levels, so women who are planning to become pregnant or who are pregnant while taking lamotrigine should take folic acid 5mg daily preferably for four weeks before conception, and for the first 12 weeks of pregnancy to offset the folate depletion from lamotrigine.

Due to physiological changes during pregnancy, blood levels of lamotrigine may decrease. During pregnancy and after birth, dose adjustment may be necessary, depending on the results of plasma-drug monitoring, therapeutic and adverse effects.

Breastfeeding

The potential benefits of breastfeeding should be weighed against the potential risk of lamotrigine because it passes into breastmilk. Monitor breastfed infants for sedation, feeding difficulties, adequate weight gain and developmental milestones. If suspected adverse reactions develop, check serum-drug concentration of the infant.

Note: Withdrawal effects may occur in infants if a mother suddenly stops breastfeeding.

ROUTINELY ASSESS FOR ANXIETY, DEPRESSION AND SUICIDALITY

An increased risk of anxiety, depression and suicidality has been associated with the use of anticonvulsants. Everyone prescribed these medicines should routinely be assessed for these symptoms and advised to seek medical advice should they emerge.

Note: Lamotrigine is not indicated for children aged under 18 years with bipolar disorder, but it is indicated from the age of 2 years for children with epilepsy.

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CLICK HERE FOR FURTHER INFORMATION ON LAMOTRIGINE AND A FULL REFERENCE LIST

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