

Intravenous aciclovir- Dosage adjustments in adult patients

Key Messages

- Intravenous (IV) aciclovir is indicated for the treatment of <u>Encephalitis</u> in the <u>NHS Ayrshire & Arran adult empirical management of infection</u> <u>guidelines</u>
- A weight based dose (10mg/kg) is recommended ideal body weight (IBW) should be used to calculate dose in obese patients
- The frequency of dosing is adjusted in renal impairment

Aciclovir dose for encephalitis in adults:

- Aciclovir 10mg/kg IV every 8 hours. Use IBW to calculate dose for obese patients.
- Caution is advised when administering to patients with renal impairment, adjust dose as per Creatinine Clearance (do not use eGFR).

How to determine if your patient is obese?

Patients whose body weight is >20% over their ideal body weight are considered to be obese.

This maximum body weight table can be used to check whether an individual should be classed as obese.

This ideal body weight table shows the ideal body weight based on height.

For example: A male patient with a height of 5ft 10" and weight of 120kg would be classified as obese as using the maximum body weight table their ABW is more than 20% of their IBW.

Therefore, using the ideal body weight table, a weight of 73kg should be used to calculate the aciclovir dose for this patient **e.g. for the treatment of encephalitis (assuming no renal impairment) the dose would be calculated as:**

- 10mg/kg every 8 hours using IBW of 73kg.
- Therefore, the dose calculated would be 730mg every 8hrs but 730mg is not a practical dose to be measured therefore it would be rounded to **750mg every 8hrs.**

Dose reduction in renal impairment

An adjustment to dosing frequency is required for patients with renal impairment*:

Creatinine Clearance (CrCl)	Dosage
25-50ml/min	Recommended dose every 12 hours
10-25ml/min	Recommended dose every 24 hours
0-10ml/min	Recommended dose should be halved and administered every 24hrs.

*Refer to <u>SPC</u> for dose recommendations in patients receiving renal replacement therapy

Adequate patient hydration should be maintained. Use of aciclovir in renal impairment increases the risk of neurological reactions.

For full prescribing information on aciclovir, please refer to the BNF or SPC.