

Dexamethasone phosphate Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- Different **brands** have different **compatibility** information
- Dexamethasone is **incompatible** with many drugs - flush thoroughly before and after administration
- Dexamethasone phosphate injection contains 8mg in 2ml injection. This is equivalent to 6.6mg in 2ml of dexamethasone base. **Prescribing practice in GUH** has been to prescribe intravenous doses in terms of **dexamethasone phosphate**. The BNF now suggests that doses be prescribed as base. This monograph will be amended to reflect this once prescribing practice changes within the hospital.
- Where supply restricts our choice of formulation pharmacy may have no choice but to use a formulation containing creatinine, which may **interfere with the serum creatinine assay**

Available preparations

Dexamethasone phosphate 8mg per 2ml vial

(equivalent to 6.6mg dexamethasone BASE per 2ml)

Reconstitution

Already in solution

If glass ampoule: Draw up using a 5 micron filter needle

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Can use either method of administration- choice depends on practicalities such as time available, fluid status of patient, etc.

Slow intravenous injection

- Administer over at least 3 to 5 minutes (ref 1)
- Rapid intravenous administration of large doses may cause cardiovascular collapse
- IV administration can cause transient tingling/burning in perianal area, especially with rapid administration or with large doses

Intermittent intravenous infusion

- Add required dose to 100mls of infusion fluid.
- Administer over 15 to 20 minutes (ref 1)
- A 50ml infusion may be used if required (eg fluid restriction) but the residual volume in the infusion line must be flushed through at the same rate to avoid significant underdosing

- IV administration can cause transient tingling/burning in perianal area, especially with **rapid administration** or with **large doses**

Dose in adults

Dose varies widely with indication (ref 2)

- **Doses are expressed as Dexamethasone phosphate (see 'Important information')**
- Depending on the indication, the doses ranges from 0.5 to 24 mg daily
- The duration of treatment depends on clinical response
- Dose should be adjusted to the minimum required to maintain the desired clinical response
- Withdrawal of the drug should be gradual following prolonged dosage, and other factors- see BNF
- Up to 40mg daily for four-day treatment blocks may be given (see specific GUH multiple myeloma protocols) but usually given orally for this indication
- Higher doses have been used for severe life-threatening cerebral oedema (50mg stat, then 8mg every two hours for three days, then reduced thereafter) (ref 2)

Bacterial meningitis (unlicensed) (ref 3)

- Consider giving dexamethasone IV 0.15mg/kg every 6 hours for four days (particularly if pneumococcal meningitis suspected in adults), preferably **starting before** or **with first dose** of antibiotic, but **no later than 24 hours** after starting antibiotic
- Avoid dexamethasone in septic shock, meningococcal septicaemia, or if immunocompromised, or in meningitis following surgery
- CAUTION: only give if you are confident that the correct antibacterials are being used (see [GUH antimicrobial guidelines](#) or <http://www.meningitis.org/> for the adult guidelines)

Storage

- Store below 25°C
- Do not refrigerate or freeze

References

Wockhardt SPC 09/03/2017

1: Injectable Medicines Administration Guide Medusa, downloaded 07/01/2022

2: Martindale - downloaded from www.medicinescomplete.com 07/01/2022

3: [GUH antimicrobial guidelines](#) accessed online 07/01/2022

Therapeutic classification

Corticosteroid