

herpes; there is limited information available on use in children.

Valaciclovir p. 442 is an ester of aciclovir, licensed in adults for herpes zoster and herpes simplex infections of the skin and mucous membranes (including genital herpes); it is also licensed in children over 12 years for preventing cytomegalovirus disease following solid organ transplantation. Valaciclovir may be used for the treatment of mild herpes zoster in immunocompromised children over 12 years; treatment should be initiated under specialist supervision.

Cytomegalovirus infection

Ganciclovir p. 443 is related to aciclovir but it is more active against cytomegalovirus (CMV); it is also much more toxic than aciclovir and should therefore be prescribed under specialist supervision and only when the potential benefit outweighs the risks. Ganciclovir is administered by intravenous infusion for the *initial treatment* of CMV infection. The use of ganciclovir may also be considered for symptomatic congenital CMV infection. Ganciclovir causes profound myelosuppression when given with zidovudine p. 457; the two should not normally be given together particularly during initial ganciclovir therapy. The likelihood of ganciclovir resistance increases in patients with a high viral load or in those who receive the drug over a long duration.

Valaciclovir is licensed for use in children over 12 years for prevention of cytomegalovirus disease following renal transplantation.

Foscarnet sodium p. 444 is also active against cytomegalovirus; it is toxic and can cause renal impairment. It is deposited in teeth, bone and cartilage, and *animal* studies have shown that deposition is greater in young animals. Its effect on skeletal development in children is not known. Foscarnet sodium should be prescribed under specialist supervision.

ANTIVIRALS > NUCLEOSIDE ANALOGUES

Aciclovir

10-Mar-2020

(Acyclovir)

● INDICATIONS AND DOSE

Herpes simplex, suppression

▶ BY MOUTH

- ▶ Child 12–17 years: 400 mg twice daily, alternatively 200 mg 4 times a day; increased to 400 mg 3 times a day, dose may be increased if recurrences occur on standard suppressive therapy or for suppression of genital herpes during late pregnancy (from 36 weeks gestation), therapy interrupted every 6–12 months to reassess recurrence frequency—consider restarting after two or more recurrences

Herpes simplex, prophylaxis in the immunocompromised

▶ BY MOUTH

- ▶ Child 1–23 months: 100–200 mg 4 times a day
- ▶ Child 2–17 years: 200–400 mg 4 times a day

Herpes simplex, treatment

▶ BY MOUTH

- ▶ Child 1–23 months: 100 mg 5 times a day usually for 5 days (longer if new lesions appear during treatment or if healing incomplete)
- ▶ Child 2–17 years: 200 mg 5 times a day usually for 5 days (longer if new lesions appear during treatment or if healing incomplete)

▶ BY INTRAVENOUS INFUSION

- ▶ Neonate: 20 mg/kg every 8 hours for 14 days (for at least 21 days if CNS involvement—confirm cerebrospinal fluid negative for herpes simplex virus before stopping treatment).

- ▶ Child 1–2 months: 20 mg/kg every 8 hours for 14 days (for at least 21 days if CNS involvement—confirm cerebrospinal fluid negative for herpes simplex virus before stopping treatment)
- ▶ Child 3 months–11 years: 250 mg/m² every 8 hours usually for 5 days
- ▶ Child 12–17 years: 5 mg/kg every 8 hours usually for 5 days

Herpes simplex, treatment, in immunocompromised or if absorption impaired

▶ BY MOUTH

- ▶ Child 1–23 months: 200 mg 5 times a day usually for 5 days (longer if new lesions appear during treatment or if healing incomplete)
- ▶ Child 2–17 years: 400 mg 5 times a day usually for 5 days (longer if new lesions appear during treatment or if healing incomplete)

Herpes simplex, treatment, in immunocompromised or in simplex encephalitis

▶ BY INTRAVENOUS INFUSION

- ▶ Child 3 months–11 years: 500 mg/m² every 8 hours usually for 5 days (given for at least 21 days in encephalitis—confirm cerebrospinal fluid negative for herpes simplex virus before stopping treatment)
- ▶ Child 12–17 years: 10 mg/kg every 8 hours usually for 5 days (given for at least 14 days in encephalitis and for at least 21 days if also immunocompromised—confirm cerebrospinal fluid negative for herpes simplex virus before stopping treatment)

Varicella zoster (chickenpox), treatment | Herpes zoster (shingles), treatment

▶ BY MOUTH

- ▶ Child 1–23 months: 200 mg 4 times a day for 5 days
- ▶ Child 2–5 years: 400 mg 4 times a day for 5 days
- ▶ Child 6–11 years: 800 mg 4 times a day for 5 days
- ▶ Child 12–17 years: 800 mg 5 times a day for 7 days

▶ BY INTRAVENOUS INFUSION

- ▶ Neonate: 10–20 mg/kg every 8 hours for at least 7 days.

- ▶ Child 1–2 months: 10–20 mg/kg every 8 hours for at least 7 days
- ▶ Child 3 months–11 years: 250 mg/m² every 8 hours usually for 5 days
- ▶ Child 12–17 years: 5 mg/kg every 8 hours usually for 5 days

Varicella zoster (chickenpox), treatment in immunocompromised | Herpes zoster (shingles), treatment in immunocompromised

▶ BY INTRAVENOUS INFUSION

- ▶ Child 3 months–11 years: 500 mg/m² every 8 hours usually for 5 days
- ▶ Child 12–17 years: 10 mg/kg every 8 hours usually for 5 days

Herpes zoster (shingles), treatment in immunocompromised

▶ BY MOUTH

- ▶ Child 1–23 months: 200 mg 4 times a day continued for 2 days after crusting of lesions
- ▶ Child 2–5 years: 400 mg 4 times a day continued for 2 days after crusting of lesions
- ▶ Child 6–11 years: 800 mg 4 times a day continued for 2 days after crusting of lesions
- ▶ Child 12–17 years: 800 mg 5 times a day continued for 2 days after crusting of lesions