NHS
East Kent Hospitals University
NHS Foundation Trust

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Prescribing Update - Inpatient treatment of COVID-19 with dexamethasone and/or remdesivir

BACKGROUND

Most prescribers will be aware that we have available in the Trust and UK now two licensed drug treatments for proven COVID-19 with defined treatment criteria outside clinical trials. The RECOVERY trial and other studies have shown benefit of dexamethasone. Remdesivir is also subject to NHS commissioned criteria which have recently been changed. For patients with COVID-19 requiring new supplementary oxygen both should be considered. If Remdesivir is not contraindicated an early referral on Careflow EKHUFT Remdesivir referrals is encouraged and essential before treatment can be authorized. Dexamethasone has better evidence as to effectiveness. Co-administration is safe.

Dexamethasone is indicated for the treatment of proven COVID-19 infection in non-pregnant and non-breastfeeding hospitalised inpatients having oxygen therapy, non-invasive or invasive ventilation, or ECMO. In pregnancy or breastfeeding inpatient women, prednisolone 40 mg administered by mouth (or intravenous hydrocortisone 80 mg twice daily) should be used instead. Benefit is best if commenced more than 7 days after onset of first COVID-19 symptoms.

Remdesivir is presently only available for a 5 day course and not in patients already on mechanical ventilation (exception rapid progression). Some patients now require full multi-disciplinary team (MDT) assessment to determine benefit:

1. if a patient is not for escalation (so this fact must be notified on careflow)
2. at escalation to invasive mechanical ventilation to confirm continuation remdesivir (so this change in status must be notified on careflow)

The Trust's ethical committee has endorsed the internal process outlined in microguide mandated by NHS-E, which is supported by clinicians familiar with the latest evidence such as full results from the ACTT-1 trial and results from the WHO SOLIDARITY trial.

ACTION POINTS for prescribers, and pharmacists

Consider dexamethasone in adult inpatients with **proven** COVID-19 infection requiring oxygen (noting in pregnancy and breast feeding the alternatives of prednisolone/ hydrocortisone are used) . Use in high clinical suspicion COVID-19 (i.e. raised D dimer, known exposure, loss of smell) only if on NIV or mechanical ventilation.

Prescribe for 10 days according to current evidence base and indication:

- Dexamethasone 2mg tablets: dosage three tablets once a day (used where ever possible)
- Alternatively dexamethasone 2mg/5mL oral solution: dosage 15mL once a day
- or dexamethasone 3.3mg/mL intravenous 1ml ampoules: dosage 1.8mL (5.94mg) once a day where oral route not available
- Treatment should stop if discharged from hospital within the 10 days (unless patient continues to meet the WHO criteria of severe or critical) or the suspected COVID-19 diagnosis becomes incorrect.

Consider the implications of using a corticosteroid with well-known properties eg:

- All patients require a baseline HbA1c and daily BM during treatment.
- Gastroprotection may be indicated (but should be stopped when drug stopped).
- If repeated steroid exposure recently patient may need a tapering (prednisolone) regime after this short course which is equivalent to 40mg prednisolone for 10 days.
- If patient on maintenance low dose oral steroids (eg prednisolone 10mg od or less or hydrocortisone) continue if possible as this is safer. The dexamethasone means the usual rule of steroid doubling in an infection is unnecessary. Because of complexities such as dexamethasone having no mineralocorticoid action refer on Careflow to endocrinology for a steroid plan for when the dexamethasone finishes.
- If patient on a quinolone antibiotic (eg levofloxacin) change to alternative antibiotic due to risk tendon rupture (absolute contraindication exists !)
- Known diabetics require BMs checked regularly as per JBDS guidelines. Always refer on Careflow to diabetic team.

Consider remdesivir for early careflow referral if SpO2 ≤94% on room air and eGFR > 30ml/min. Other conditions apply such as in unproven COVID-19. See microguide.

None of these therapies preclude recruitment to the continuing RECOVERY trial or change in guidance on COVID-19 specific thrombosis risk assessment.

For further information please:
Discuss with your clinical pharmacist
Call Medicines Information on 723-6001
Utilise Trust formulary to access safety information on a medicine