





# Renal Disease in the Last Days of Life

#### INTRODUCTION

The guideline is intended to direct care for patients with CKD Stage 4 or 5 (eGFR<30mL/min) with severe renal impairment or end stage renal disease (ESRD). These patients have a high mortality rate, experience significant symptom burden along with psycho-social and spiritual issues. In an appropriate patient, it is necessary to discuss regarding withdrawal of dialysis.

#### **ASSESSMENT**

- Assess for nausea, vomiting, itching and other symptoms associated with renal disease, co-morbidities (diabetes mellitus, ischaemic heart disease, peripheral vascular disease), dialysis and other diseases like cancer, old age frailty
- Assessment must determine the underlying aetiology of symptoms, effectiveness
  of treatment and impact on quality of life for the patient and family (refer to the
  Guideline Symptom Assessment)
- It is important to rule out presence of potential reversible causes like hypercalcemia, infection, opioid toxicity
- Assessment must include signs and symptoms that indicate terminal phase
  - Profound weakness and social withdrawal
  - Loss of interest in food and drink
  - > Dysphagia and difficulty to swallow medications
  - Drowsiness and/or refractory delirium
  - Altered breathing patterns (especially Cheyne-Stokes breathing)
  - Progressive fall of blood pressure and/or temperature
  - Coma

#### **MANAGEMENT**

#### Recommendations

- Use a multi-disciplinary approach
- Review goals of care and initiate advance care planning with the patient and family at the earliest and review on regular basis
- Avoid unnecessary interventions, investigations and monitoring
- Review symptoms, medications and stop medications that do not add to the comfort of the patient
- NSAIDs, morphine and codeine should generally be avoided in patients with ESRD







• Towards the terminal phase, many of the medications can be given as CSCI

# Advance care planning

- Determine the goals of care, place of care and preferences of patient and family regarding end of life care
- If appropriate, discuss with patient and family on withdrawal of dialysis, the limited benefits of dialysis at this stage and the timing of withdrawal
- Continue good communication and allow shared decision making with informed consent
- Determine a surrogate decision maker/nominated healthcare spokesperson

## **Pharmacological measures**

#### • Pain

- Tab. Acetaminophen 1000mg q6h, maximum of 4000mg; can be used safely without dose adjustments
- Tab. Tramadol 50-100mg bd (maximum); use with caution as seizures with higher doses is a concern
- Methadone can be used safely in patients with renal failure for moderate to severe pain; initiate at a low dose 200-700 mg/24 hours in opioid naïve patients or switch after determining equivalent dose in patients on opioids
- Fentanyl patch can be continued safely and use appropriate rescue dose of morphine or tramadol for breakthrough pain
- ➤ Buprenorphine patch can be used safely and initiated for moderate to severe pain; use appropriate rescue dose of morphine or tramadol for breakthrough pain
- ➤ Gabapentin useful in neuropathic pain. For patients receiving haemodialysis, a loading dose of 300mg can be given, followed by 200-300mg after each dialysis session. For patients who are not receiving dialysis, a dose of 200-700mg can be given OD

# Anxiety and distress

- Tab. Lorazepam 0.5-1mg S/L OD and prn (frequency may be increased based on the severity)
- Tab. Diazepam 2.5-5 mg hsod (up to 2.5mg tid)
- Inj. Midazolam 2.5-5mg S/C (or a higher dose as CSCI)

#### Breathlessness

- > Start with immediate release Morphine 2.5 mg PO prn and if >3 doses/24 hours, start Fentanyl patch 6mcg/hour patch and continue the appropriate rescue dose of the immediate release morphine prn
- Tab. Lorazepam 0.5-1mg S/L hsod and prn (frequency may be increased based on the severity) consider in presence of panic or anxiety



# PALLIATIVE CARE GUIDELINES FOR A HOME SETTING IN INDIA

➤ Inj. Midazolam 1-3mg S/C q8h and prn - consider in presence of refractory breathlessness and if still breathlessness is uncontrolled, discuss palliative sedation with patient and/or family and two palliative care physicians agree on this

# • Respiratory tract secretions

- Inj. Hyoscine butyl bromide 20mg S/C q6h and prn (Maximum 120mg/24 hours)
- ➤ Inj. Glycopyrronium 200mcg S/C q6h q8h as required
- Hyoscine Hydrobromide patch 1.5mg/72 hours (if available) can be used once acute secretions are controlled. The patch can be applied behind the ear

### Nausea and vomiting

- Haloperidol 1.5-5mg/24 hours PO, S/C or IV in two to three divided doses
- Metoclopramide 10mg PO, S/C or IV q6h q8h if prokinetic is useful

#### Delirium

- > Restless and confused but cooperative
  - ❖ Haloperidol 1.5-5mg PO S/C q4h q8h
- > Delirium with paranoia, confusion and/or aggression
  - ❖ Haloperidol 5-10mg S/C or IV q30 q60 min until relief then maintenance dose is 50% of amount to achieve control (usually between 1.5-20mg/24 hours divided into one to three doses)
  - ❖ Add Midazolam 2.5-5mg S/C stat and q6h prn if agitation persists
- Pruritus (refer to the Guideline Pruritus)
- Restless leg syndrome
  - Correct the correctable
    - Iron deficiency anaemia iron and erythropoietin therapy
    - Improve sleep quality

## > Non-pharmacological measures

- Massage
- Warm bath
- Warm/cool compresses
- Relaxation techniques
- Good sleep hygiene
- Foods containing caffeine, nicotine, and alcohol should be reduced as well, especially in the hours before bedtime
- Exercise

#### Pharmacological measures

- Ropinirole 0.25-2mg/24 hours
- Pergolide Initially 0.05mg/24 hours, increased gradually with 0.05mg/24 hours, up to 3mg/24 hours
- Pramipexole 0.125-0.75mg/24 hours





# PALLIATIVE CARE GUIDELINES FOR A HOME SETTING IN INDIA

- ❖ Gabapentin 200-300mg 3/7
- Levodopa 25 200mg/24 hours
- Skin care (refer to the Guideline Care of the bedridden patient)
- Anticipatory prescribing To improve care at end of life, it is useful if medications
  for symptom control are made available at home so that they can be administered
  without unnecessary delay, if required (refer to the Guideline Anticipatory
  Prescribing)

Non-pharmacological Management (refer to the Guidelines - Specific symptoms)

#### REFERENCES

Davison, S.N. The Ethics of End-of-Life Care for Patients with ESRD. Clinical Journal of the American Society of Nephrology. (2012); 7: 2049-2057

Giannaki, C., Hadjigeorgiou, G.M., Karatzaferi, C., Pantzaris, M.C. Stefanidis, L., Sakkas, G.K. Epidemiology, impact, and treatment options of restless legs syndrome in end-stage renal disease patients: an evidence-based review. *Kidney International*. (2014); 85: 1275-1282

Kane, P., Vinen, K., Murtagh, F. E.M. Palliative care for advanced renal disease: A summary of the evidence and future direction. *Palliative Medicine*. (2013); 27(9): 817-821

Lacey, J. (2015). Management of the actively dying patient. Oxford Textbook of Palliative Medicine (pp. 1125-1133)

Rak, A., Raina, R., Suh, T.T., Krishnappa, V., Darasz, J., Sidoti, C.W. Gupta, M. Palliative care for patients with end-stage renal disease: approach to treatment that aims to improve quality of life and relieve suffering for patients (and families) with chronic illnesses. *Clinical Kidney Journal*. (2017); 10(1): 68-73

Twycross, R., Wilcock, A., Howard, P. (2014). Central Nervous System. Palliative Care Formulary 5. (pp. 210-384)

Twycross, R., Wilcock, A., Howard, P. (2014). Drug treatment in the imminently dying. Palliative Care Formulary 5. (pp. 819-830)