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FAST FACTS AND CONCEPTS #208

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Background *Fast Fact #207* discussed decision-making around dialysis discontinuation; this Fast Fact addresses care of the patient around the time of discontinuation.

Communication and care-planning at the time of dialysis cessation

- Counsel about what to expect: mean survival following dialysis withdrawal is 8-10 days (although rarely can be many weeks). Address the likelihood of progressive encephalopathy.
- Counsel about symptoms (see below). Reassure patients/families that these can be adequately treated, although drugs with sedating side effects may be necessary to ensure comfort.
- Recommend continuing fluid restriction (< 1L/day) to minimize edema if the patient is not thirsty. Discuss diet: a liberal, pleasure-based diet is appropriate for many patients although they should be cautioned it could worsen symptoms from edema.
- Address potential care sites for the final days of life.
- Review other medical treatments the patient is receiving and discontinue those that will not improve their quality of life while dying; clarify treatment limitations including resuscitation (code) status.
- Provide emotional/psychological, spiritual, social work, and bereavement support services.

Symptom Management In one cohort of hospitalized patients who stopped dialysis confusion/agitation was reported to affect 70% of patients, followed by pain (55%), dyspnea (48%), nausea (36%), twitching/seizures (27%), anxiety/psychological distress (27%), pruritis (24%), and peripheral edema (21%). Because of a paucity of clinical research, the following recommendations are largely based on clinical experience and pharmacologic common sense. Many drugs which were previously cleared by dialysis may need to be dose-adjusted or discontinued. Treatment plans should be frequently re-evaluated, with particular attention to the use of scheduled medications.

- **Pain management:** Acetaminophen is the agent of choice for mild pain. *Fast Fact #161* addresses opioid use in renal failure. Fentanyl and methadone are considered safest after dialysis discontinuation, although methadone should only be initiated by clinicians familiar with its use. Toxic hydromorphone metabolites, previously cleared by dialysis, can accumulate rapidly once dialysis is stopped and it should be used with caution and close monitoring of side effects. Gabapentin and pregabalin quickly accumulate once dialysis is stopped and should be discontinued or severely dose-reduced (see *Fast Fact #49*).
- **Shortness of breath:** Oxygen, positioning, and opioids are the mainstays of therapy (see *Fast Fact #27*). Ultrafiltration is not recommended as it can be distressing for patients/family to see the patient back on a therapy which appears similar to hemodialysis. For the occasional patient who has a residual urine output of >100 ml/day, high dose diuretics can be used.
- **Anxiety/agitation/restlessness:** Assure pain and psychosocial issues are addressed. Haloperidol or benzodiazepines are effective. Haloperidol may lower the seizure threshold and the metabolites are excreted in the urine and feces so it is recommended to dose at half the typical starting dose following dialysis withdrawal. While benzodiazepines do not accumulate in chronic kidney disease, clinical experience supports starting with very low doses in this population.
- **Restless legs:** Clonazepam is particularly useful for the restless legs associated with uremia (0.5 – 2.0 mg bid). Clonidine (0.1-0.2 mg bid) can also be used.
- **Muscle cramps:** Dialysis patients are often treated with quinine sulphate which accumulates rapidly once

dialysis is stopped and should be discontinued. Clonazepam and other benzodiazepines are better in this setting.

- **Nausea:** Reduced doses of metoclopramide (starting at 5mg bid) are effective for gastroparesis. Uremia-induced nausea often responds well to dopamine antagonists such as haloperidol and prochlorperazine which are often sedating in the context of uremia. Ondansetron has some advantages as it is less sedating and does not accumulate in kidney failure.
- **Pruritus:** Emollients such as hydrourea cream, ondansetron, and antihistamines may be beneficial. Gabapentin, while effective, is too toxic in this population to initiate its use.

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ACGME Competencies: Patient Care, Interpersonal and Communications Skills

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