AKI-D

Care of the patient with Acute Kidney Injury in the Chronic Outpatient Dialysis Unit

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Based on a lecture by John Webb, MD, Univ Ky at the Kidney Symposium sponsored by NKF, Aug 2017

AKI-D is Common

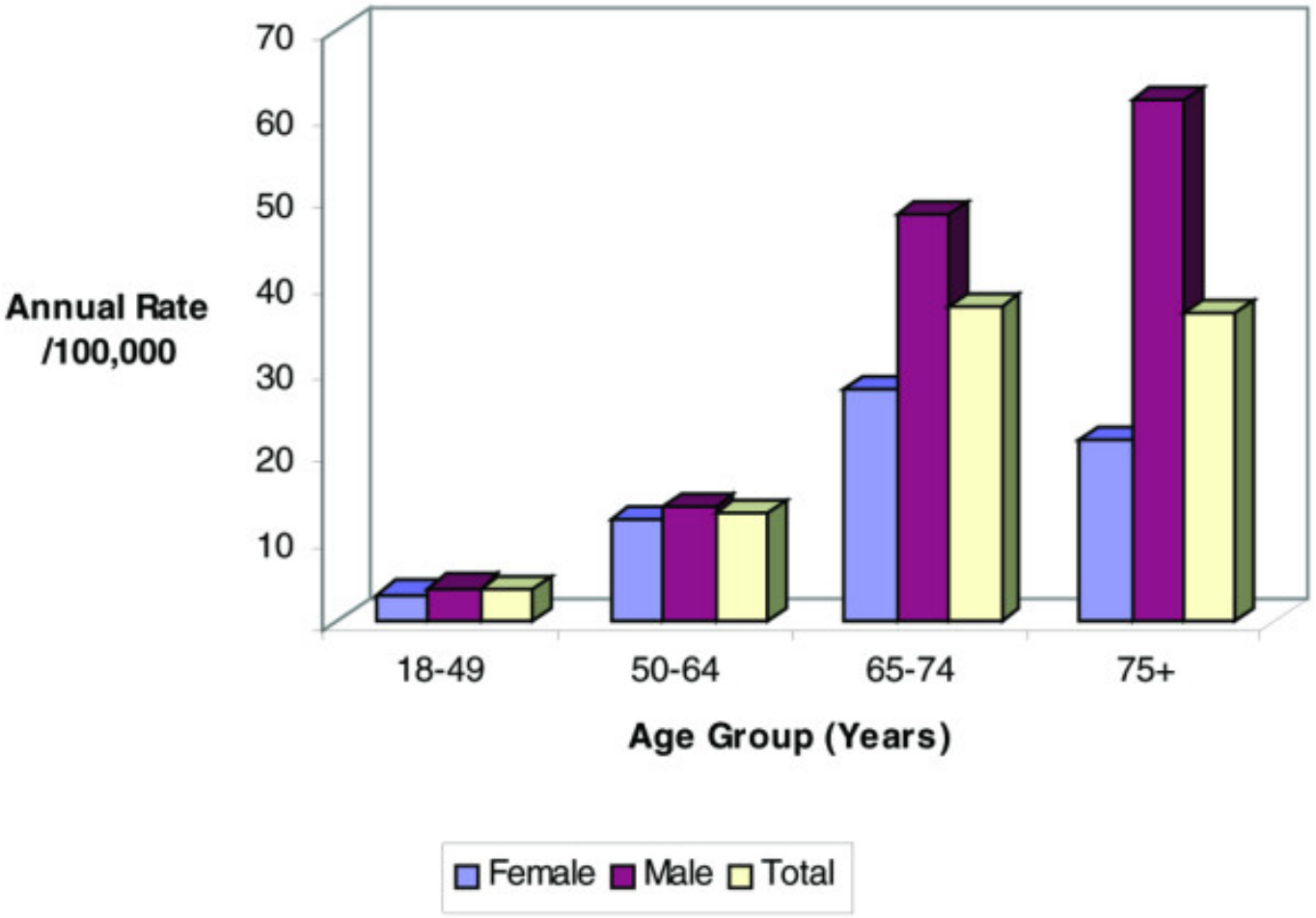
- 20% of hospitalized patients will develop some degree of AKI
- 1-2 % of patients will require Dialysis
- 40-60% of AKI patients will not survive to discharge
- 10-30% of patients with AKI-D that will still require Dialysis after discharge

AKI-D out of Hospital

- 23% of AKI-D patients recover renal function within the first 3 months
- 34 % recover by 6 months
- Eligible for the ESRD program once they have been on dialysis for 3 months

Bagshaw 2005

Mortality rates for severe AKI



Bagshaw et al. Prognosis for long term survival and renal recovery in critically ill patients Crit Care 2005;9(6) R700-9.

Which patients with AKI-D are likely to Recover?

- Generally under 65 years old
- ATN from Surgery or Contrast
  - Vs Sepsis
- No other organ failure after discharge.

Nursing considerations for AKI-D

- Try to leave these patients a little wet to facilitate renal recovery
- Check lab more frequently
- Complete Medication review regularly as things can change rapidly
- Increase communication with the Nephrologist and Other docs, ECF
- When should we discuss modality/ access?

Dietitian Considerations in AKI-D

- Increase protein intake in these patients
  - Target 1.5 -2 gm/kg/day
  - Limit Vitamin C

Social worker Considerations in AKI-D

- Patient may not have needed much of a support system prior to the acute illness so needs more help adjusting
- Depression screening should occur early – in first month or weeks – Don't wait!

How do we manage AKI-D patients?

- Weekly renal panel and CBC
- Every 2 week 24 hour urine (once patients urine output recovers)
  - Looking for creatinine clearance over 20 ml/min to safely come off Dialysis
- Weekly eval for UOP, weight, swelling, BP, intake, and communication with the Nephrologist who knows the patient.

AKI-D Management

- Make a sign for the patient's chair or machine that designates as AKI-D
- Weekly evaluation for recovery of renal function
- Measure Urine output at home and report each treatment
- What is patient care goal?
  - Do they need clearance of waste products?
  - Do they need fluid control?

Can Dialysis Delay Recovery From AKI-D?

- Dialysis causes hypotension/ fluid shifting
- Complement activation that worsens inflammation in the damaged kidneys
- John Conger, MD study in Vietnam showed multiple areas of ATN with various ages corresponding to each Dialysis treatment.
  - Conger, J. A controlled evaluation of prophylactic dialysis in post traumatic acute renal failure. J. Trauma 15: 1056, 1975

Transition Off Dialysis

- Most patients will need a diuretic started or their old diuretic resumed
  - creatinine X 40 = lasix dose to start
- Should we start ACE/ ARB for hypertension?
- When to take out the Catheter?
- Arrange for follow up in the Nephrology Office in a week

Reimbursement

- For the Dialysis unit – Good!
- For the nephrologist - ??