

DIALYSIS / RENAL PATIENT

UNIVERSAL PATIENT CARE PROTOCOL

CAPNOGRAPHY PROCEDURE

AIRWAY PROTOCOL

IV / IO PROCEDURE

DIAGNOSTIC EKG PROCEDURE

1ST Contact to EKG and Transmission < 10 Min

Airway / Breathing

Circulation / Shock

Cardiac

Medical

Trauma

Breathing Difficulty

Treat per RESPIRATORY DISTRESS Protocol or
CONGESTIVE HEART FAILURE Protocol based on Lung

Missed Dialysis with Cardiac Changes

Treat per HYPERKALEMIA Protocol

Chest Pain

Treat with ACUTE CORONARY SYMPTOMS Protocol

Symptomatic HYPERtension

Blurred Vision Headache Diaphoresis
DISCUSS each case with Online Medical Control
After STROKE ASSESSMENT

Symptomatic HYPOtension

Pre-Dialysis Consider Septic Shock / Cardiogenic Shock*Post Dialysis* Consider Volume Depletion

Treat Per Appropriate Shock Protocol

CONSIDER ITD PROCEDURE

NO ITD if Cardiogenic Shock



Bleeding Catheter / Shunt

Apply Pressure Over Site / Pressure Points

Apply Tourniquet if risk of Exsanguination

Above and Below Site - Not over Shunt

Hemostatic Agents may be considered in
CHEST and GROIN ACCESS ONLY

TRANSPORT to appropriate facility CONTACT receiving facility CONSULT Medical Control where indicated APPROPRIATE transfer of care

EMT Intervention

AEMT Intervention

PARAMEDIC Intervention

Online Medical Control

DIALYSIS / RENAL PATIENT

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"> Renal failure Dialysis treatment Anemia Dialysis treatment schedule Previous implications Long term catheter access Shunt access Hyperkalemia 	<ul style="list-style-type: none"> Hypotension Bleeding Fever Electrolyte imbalances Nausea Vomiting Altered mental status Seizure Dysrhythmias 	<ul style="list-style-type: none"> Congestive heart failure Pericarditis Diabetic problem

KEY POINTS

The chronic renal dialysis patient has numerous medical problems. The kidneys help maintain electrolyte balance, acid-base balance and rid the body of metabolic waste. Kidney failure results in a build-up of toxins within the body, which can cause many problems.

Dialysis is a process, which filters out the toxins, excess fluids and restores electrolyte balance. The process may be done in two ways:

1. Peritoneal Dialysis

Toxins are absorbed by osmosis through a solution infused into the peritoneal cavity; and then drained out. The solution is placed into the abdomen by means of a catheter, which is placed below the navel. This process must be done frequently, as frequently as every 12 hours for a period of 1 - 2 hours.

2. Hemodialysis

Removes toxins by directly filtering the blood using equipment that functions like an electric kidney, circulating the blood through a Shunt that is connected to a vein and an artery. This process usually needs to be done every 2 - 3 days for a period of 3 - 5 hours. A permanent shunt can be surgically formed as a fistula.

POSSIBLE COMPLICATIONS OF DIALYSIS TREATMENT

1. Hypotension (15-30%)
 - May result in angina, MI, dysrhythmia, altered mental status, and seizure
2. Removal of therapeutic medications
 - Example: Tegretol
3. Disequilibrium syndrome
 - Cause: shift of urea and / or electrolytes
 - Signs and symptoms: Nausea and / or vomiting, altered mentation, or seizure
4. Bleeding
 - These patients are often treated with heparin and they may have a low platelet count
 - Bleeding may be at the catheter site, retro peritoneal, gastrointestinal, or subdural
5. Equipment malfunctions
 - Possible air embolus
 - Possible fever or endotoxin
- Do not take blood pressure in arm that has the active shunt.
- A renal patient in full cardiac arrest should be treated according to current ACLS guidelines.