

Preventive Health Care Measures Are Decreased in Pediatric Compared to Adult Chronic Dialysis Patients.

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Infections and cardiovascular (CV) disease account for significant morbidity and mortality in pediatric and adult chronic dialysis patients. We studied the frequency of preventive health care measures given in incident US pediatric (age 0-19 years) chronic dialysis patients for the years 1999-2001 and compared 5 measures with adults (age > 19 years). Preventive measures evaluated included vaccinations (Vac): influenza, pneumococcal, hepatitis B, diphtheria/pertussis/tetanus (DPT), polio, measles/mumps/rubella (MMR), varicella; lipid monitoring; and carnitine testing or injection. Pooled 1999-2001 data were used for gender, race, and modality analyses.

Influenza, hepatitis B, and pneumococcal Vacs were given more frequently in adult compared to pediatric patients (all p-values < 0.0001). DPT, polio, MMR, and varicella Vacs were given to <2% of pediatric patients. Carnitine testing was done in 0.3% of adults and 0.9% of pediatric patients while injection was given to 3.7% of adult and 1.4% of pediatric patients. Cholesterol and triglyceride testing was done in 43.4% and 12.3% of adults vs 25.4%(p < .0001) and 12.1% (p = .9044) of pediatric patients.

Within pediatric patients, influenza Vacs were more common in hemodialysis (HD) compared to peritoneal dialysis (PD) patients (17% vs. 9.6%, p = .0050), as were hepatitis B Vacs (29% vs. 15%, p < .0001), while 4% of both groups received pneumococcal Vacs. More PD patients received a Cholesterol test (29% vs 23%, p = .1020), and a triglyceride test (18% vs 9%, p = .0004) than HD patients.

Preventive measures that may impact on infection and CV disease risk are given less frequently in children compared to adult chronic dialysis patients. Differences are also present in pediatric patients by dialysis modality. These data suggest preventive measures can be improved in pediatric chronic dialysis patients.

	Adults	All Peds	HD Peds	PD Peds
N	110,024	694	416	270
Flu Vac (%)	46.8	14.1	17.3	9.6
Pneumo. Vac (%)	8.9	4.0	4.1	4.1
Hep B Vac (%)	48.5	23.5	29.3	14.8
DPT (%)		1.3	0.5	2.6
Polio (%)		0.9	0.5	1.5
MMR (%)		1.2	0.7	1.9
Varicella (%)		1.0	0.2	2.2