

Nephrotic Syndrome (Proteinuria >3.5 g/day):

	Minimal changes disease MCD	Focal segmental glomerulosclerosis FSGS	Membranous Nephropathy	Membrano-proliferative glomerulonephritis	Diabetes mellitus	Amyloidosis
Common in:	-Most common cause in children.	- Most common cause in <u>Hispanics & African American.</u>	Most common cause in <u>Caucasian adults.</u>	1. Type I- subendothelial associated with HBV & HCV. 2. Type II (dense deposit disease)-intramembranous; associated with C3 nephritic factor (autoantibody that stabilizes C3 convertase, leading to over activation of complement, inflammation, and low levels of circulating C3	Glomerular efferent arteriole is more affected, leading to high GFP.	Kidney is the most commonly involved organ
Associated with:	- Hodgkin lymphoma.	- HIV, heroin use & SC-disease.	- Hepatitis B&C, SLE, Solid tumors, Drugs (penicillamine, NSAIDs).		- High serum glucose leads to nonenzymatic glycosylation of the vascular basement membrane resulting in hyaline arteriosclerosis.	Amyloid deposits in the mesangium
HE stain:	-normal.	- focal, Segmental sclerosis.	-Thick glomerular basement membrane	-Thick glomerular basement membrane, <u>'tram-track' appearance.</u>	sclerosis of the mesangium with formation of Kimmelstiel-Wilson nodules	apple-green birefringence under polarized light after staining with Congo red
EM:	- Effacement of foot processes.		-subepithelial deposits with 'spike and dome'.	-	-	-
IF:	- negative, no immune complex.		- Granular IF due to immune complex		-	-
Extra information:	- Selective proteinuria	-	-	-	-	-
Response:	Excellent response to Steroids	- Poor response to steroids; progresses to chronic renal failure			ACE inhibitors slow progression of hyperfiltration-induced damage.	-