Urinary Casts

Casts are molds of the renal tubule · they point to the level and type of kidney damage

H	**Hyaline**	normal (Tamm-Horsfall protein)
RBC	**Red cell**	glomerulonephritis
WBC	**White cell**	interstitial nephritis, pyelonephritis, lupus, transplant rejection
G	**Granular / epithelial**	acute tubular necrosis (muddy brown)
W	**Waxy**	advanced chronic kidney disease
F	**Fatty (Maltese cross)**	nephrotic syndrome

Red cell	White cell	Muddy brown
Glomerular origin	Tubulointerstitial or infectious origin	Acute tubular necrosis

Hyaline casts are nonspecific: dehydration and exercise can produce them