

Urinary sediment non bacterial and crystalline

Indication : Nephrolithiasis

Method : Microscopy

Sediment results	Frequent	Less frequent	Rare
<i>Erythrocyturia</i>	all forms of the glomerulonephritis, kidney participation in systemic disorders, benign and malignant tumors of the kidneys or urinary tract system, nephrolithiasis, traumata, deformities, esp. cyst kidneys, embolism or thrombosis of kidney vessels, hemorrhagic diathesis, medicaments	urinary infects, tuberculosis, diabetic nephropathy, pyelonephritis, interstitial nephritis, toxic kidney damages, hereditary kidney diseases (e.g. Alport syndrome after physical efforts)	familial hematuria, arteriolosclerosis, infectious diseases, heart insufficiency, healthy persons
<i>Acanthocyte</i>			more than 5% of the total number of erythrocytes are suspicious of glomerular hematuria, more than 10% make it probable
<i>Erythrocyte cylinder (cast)</i>	all forms of glomerulonephritis, kidney participation in systemic disorders		cyst kidneys, amyloidosis of the kidneys, traumata

Sediment results	Frequent	Less frequent	Less frequent
<i>Leukocyturia</i>	pyelonephritis, all inflammatory disorders of the urinary tract, interstitial nephritis	glomerulonephritis, transplant rejection, systemic disorders with kidney participation	
<i>Eosinophiluria</i>	interstitial drug induced acute nephritis		rapidly progressive glomerulonephritis, acute prostatitis

Sediment results	Frequent	Less frequent	Rare
<i>Leukocyte cylinder (cast)</i>	acute and chronic pyelonephritis		glomerulonephritis, interstitial nephritis
<i>Bacterium cylinder (cast)</i>	acute and chronic pyelonephritis		
<i>Hyaline cylinder (cast)</i>	all acute and chronic kidney diseases particularly with nephrotic syndrome, kidney congestion in heart insufficiency	physical efforts	after highly effective diuretics, feverish infections, orthostatic albuminuria
<i>Granulated cylinder (cast)</i>	all acute and chronic kidney diseases	plasmocytoma	physical efforts
<i>Wax cylinder (cast)</i>	all advanced chronic kidney diseases		acute kidney failure
<i>Fat cylinders (casts), fat grain cells, fat drops</i>	all kidney diseases with nephrotic syndrome		toxic kidney damages, diabetic nephropathy, arteriosclerosis
Sediment results	Frequent	Less frequent	Rare

<i>Squamous epithelia</i>		from the lower part of the urethra in men & women	
<i>Transition epithelia</i>	infections of urinary tract	healthy	
<i>Kidney or tubulus epithelia</i>	generalized virus disorders, hepatitis, cytomegaly, toxic kidney damages	pyelonephritis, glomerulonephritis	
<i>Epithelium cylinder (cast)</i>		generalized virus disorders	diuresis in acute kidney failure, pyelonephritis, glomerulonephritis
<i>Cell agglomerations</i>			tumors of the urinary tract, papilla necrosis
<i>Trichomonas</i>	trichomonas infections of the urinary tracts or genital tracts		

Crystalline constituents:

Sediment results	Frequent	Less frequent	Rare
<i>Urate</i>	in concentrated urine in fever, gout		
<i>Diammonium urate</i>	slightly alkaline urine		
<i>Uric acid (cofactor hyperurice-mia)</i>	uric acid crystallizes in highly concentrated urine in fever, gout, in acidic urine	increased nuclear decay (e.g. leukosis, cytostatic therapy in malignomas)	
Sediment results	Frequent	Less frequent	Rare

<i>Calcium oxalate</i>	after consumption of oxalate rich food (e.g. vegetables, rhubarb, oranges)		primary hereditary oxalosis
<i>Calcium sulfate</i>			only in strongly acidic urine
<i>Ammonium magnesium phosphate (triplephosphate)</i>	in distinctive bacteriuria (e.g. acute cystitis), bacterial contamination		
<i>Dicalcium phosphate</i>			in alkaline or slightly acidic urine
<i>Amorphous alkali phosphates (tricalcium phosphate and trimagnesium phosphate)</i>		phosphaturia with a slightly cloudy urine	
<i>Dimagnesium phosphate</i>			in alkaline urine
<i>Calcium carbonate</i>			in alkaline or slightly acidic urine
<i>Cystine</i>			hereditary cystinuria, accompanied by increased cystine, lysine, arginine or ornithine secretions.

Sediment results	Frequent	Less frequent	Rare
<i>Cholesterol</i>			chyluria in tumors,

			filariasis
<i>Leucine/tyrosine</i>		in acidic urine, heavy hepatic tissue damage	
<i>Hippuric acid</i>			after intake of salicylates, liver diseases
<i>Sodium urate (brick dust like)</i>			without pathological significance
<i>Xanthine</i>			hereditary xanthin oxidase defect

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>