Procedure
Dignity Health Central Coast Service Area

**SUBJECT**: Urine Eosinophils

**ORIGIN**: Urinalysis

**NUMBER**: 7500.U.20

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| --- |
| **Applies to:** |
| [x]  Santa Maria Campus,Marian Regional Medical Center | [x] Arroyo Grande Campus,Marian Regional Medical Center | [x] French Hospital Medical Center |
| [ ] St. John’s Pleasant Valley Hospital | [ ] St. John’s Regional Medical Center |

# Principle:

To assess the number of eosinophils present in a patient’s urine sample for use in diagnosing a variety of clinical conditions affecting the kidney or urinary tract such as drug hypersensitivities, interstitial nephritis, interstitial cystitis, transplant rejection, and parasitic infections.

# Specimen Collection:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sample Type | Container | Minimum Volume | Storage Temperature | Stability |
| Random Urine | Labeled sterile urine container | 10mL (4 mL pediatric) | Room temp2-8ºC | 2 hours24 hours |

# Materials:

|  |  |  |
| --- | --- | --- |
| **Reagents / Media** | **Supplies / Materials*** Conical urine tubes for centrifugation
* Cytocentrifuge funnels and slides
* Wright’s Stain
 | **Equipment*** Centrifuge
* Cytocentrifuge
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# Quality Control:

## Frequency

Slides are assessed each day for proper stain in the Hematology Department. Eosinophils must always appear as a segmented neutrophil (usually bi-lobed) with bright orange granules.

# Procedure:

## Spin down entire random sample and pour off supernatant.

## Prepare cytospin specimen. See Cytospin Procedure 7500-H-20.

## Stain the air dried smear of sediment using the Wescor Stainer procedure 7500-H-21.

## Report a percentage of eosinophils seen. Report all significant cellular elements in the LIS.

# Interpretation of Results:

Normal Reference Range: No Eosinophils seen

1% - 5% is indeterminant

Greater than 5% is highly indicative of acute interstitial nephritis.

#  Results:

Results are reported as a percentage:

<1%

1%-5%

>5%

# References:

Muriithi, Angela K, Nasr, Samih H. and Leung, Nelson. Utility of Urine Eosinophils in the Diagnosis of Acute Interstitial Nephritis. Clin J Am Soc Nephrol. 2013 Nov 7; 8(11): 1857-1862.