Test Definition: EOSU1

Eosinophils, Random, Urine

Overview

Useful For
Investigation of possible acute interstitial nephritis

Method Name
Hansel Stain

NY State Available
Yes

Specimen

Specimen Type
Urine

Specimen Required
Container/Tube: Unstained cytospin slide
Specimen Volume: 1 slide
Collection Instructions:
1. Collect a random urine specimen.
2. Centrifuge 10 mL of a random urine collection.
3. Pour off supernatant. Assess urine sediment for presence of white blood cells (WBC). If no WBC are seen, the eosinophil test cannot be performed. If WBC are present, prepare slides using the centrifuged sediment.
4. The unstained slide should be prepared within 2 hours of collection. Only an unstained slide will be accepted. **Any other specimen, including the raw urine specimen, will be rejected**.
5. Centrifuge urine in cytospin centrifuge at speed of 750 rpm for 5 minutes.
6. Slides need to be labeled with patient name and date of birth
7. Guidelines for slide preparation. Use the sediment to prepare slides as follows:
a. 150 mcL of sample for 1 to 3 WBC/high power field (hpf)
b. 100 mcL of sample for moderate to normal sediment (<50 cell/hpf)
c. 50 mcL of sample for heavier sediment (>50 cells/hpf)
d. 25 mcL for packed fields of sediment

Forms
If not ordering electronically, complete, print, and send a Renal Diagnostics Test Request (T830) with the specimen.

Specimen Minimum Volume
See Specimen Required

Reject Due To

Stained slides	Reject
Broken or cracked unstained slides	Reject
Urine aliquots	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Urine	Ambient (preferred)	14 days	SLIDE
	Refrigerated	14 days	SLIDE
	Frozen	14 days	SLIDE

Clinical & Interpretive

Clinical Information

Eosinophils are white blood cells that normally do not appear in urine. The presence of eosinophils in the urine is seen in acute interstitial nephritis, which is caused by an allergic reaction, typically to drugs.

Reference Values

0%

Interpretation

Results of greater than 5% eosinophils are indicative of acute interstitial nephritis; results between 1% and 5% eosinophils are indeterminant.

Cautions

Broken or cracked unstained slides are not compatible with the instrumentation used in our performing laboratories and will be rejected. Additional material may be requested.

Clinical Reference

1. Hansel FK. In: Clinical Allergy. CV Mosby Company; 1953

2. Brunzel NA. Microscopic examination of urine sediment. In: Fundamentals of Urine and Body Fluid Analysis. 4th ed. Saunders; 2017:141

3. Muriithi AK, Leung N, Valeri AM, et al. Biopsy-proven acute interstitial nephritis, 1993-2011: a case series. Am J Kidney Dis. 2014;64(4):558-566. doi:10.1053/j.ajkd.2014.04.027

Performance

Method Description

Hansel stain.(Brunzel NA, ed: Microscopic examination of urine sediment. In: Fundamentals of Urine and Body Fluids

Analysis. 3rd ed. Elsevier; 2012:171-172)

PDF Report
No

Day(s) Performed
Monday through Sunday

Report Available
Same day/1 day

Specimen Retention Time
Urine: 2 days; Slide: 7 days

Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Main Campus

Fees & Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification
This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information
85999

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
EOSU1	Eosinophils, U	32014-3

Result ID	Test Result Name	Result LOINC® Value
EOSU1	Eosinophils, U	32014-3