

CRYSTAL
ANALYSIS,
SYNOVIAL
FLUID

Orderable - CRYSTAL ANALYSIS

Turn Around Time: 8 hours

STAT: 4 hours

Alternate Name(s):

Crystals (Joint Fluid)

Specimen:

Synovial fluid collected in K₂ or K₃ EDTA

Note: Specimens anticoagulated with heparin and oxalate are **not** acceptable for crystal analysis.

Collection Information:

Volume is not a limiting factor, however a minimum volume of 0.3 mL fluid (includes cell count) is better. The smallest quantity is eligible for analysis.

Reference Ranges:

No crystals seen

Interpretive Comments:

MSU (monosodium urate crystals) are usually diagnostic of gout. Crystals are seen in 90% of patients during an acute attack.

CPPD (calcium pyrophosphate dehydrate) crystals are associated with pseudogout or articular chondrocalcinosis.

Cholesterol crystals may be seen in chronically inflamed joints as in rheumatoid arthritis.

Corticosteroid preparations used for intra-articular injections appear as crumbled amorphous material. It may be present up to one month after injection.



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION

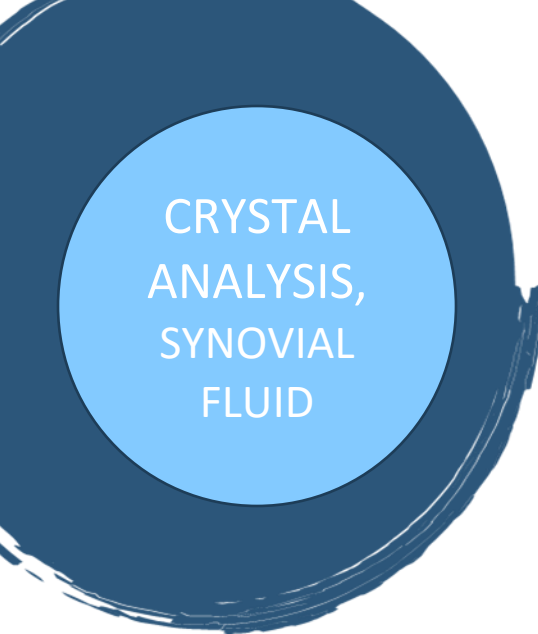


Method of Analysis:
Compensated polarized
light microscopy



Test Schedule:
As required

Available STAT-24
hours/day, 7 days/week



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Special Processing:

In severe gout, a chalky deposit (tophus) may be aspirated and sent for analysis. The laboratory will resuspend the material in physiological saline.

Critical Information Required:

Site of collection (e.g. left knee, right toe, etc.)

Storage and Shipment:

Ship sample at room temperature.

Stat specimens must be received in the laboratory within 2 hours of collection.

If testing is delayed, store specimen at 2-8°C.