Work-Up of LEUKOCYTOSIS

Blasts on Smear

Blood Smear AND History & Physical Exam include nodes and spleen

Leukocytosis >11 (Repeated)

Lymphocytes ↑

Myeloid Cells

Lymphocytes >5

Refer to Lymphocytosis Pathway

EMERGENT REFERRAL
Page Hematologist On-Call
StB: 204-237-2053 / HSC: 204-787-2071

Basophils ↑

Concerning Features
- Count >2 or increasing, or persistent
- Not explained by infection
- Dysplasia
- Immature forms
- Anemia/thrombo-cytopenia
- Splenomegaly

NO

YES

Consider
- Cancer
- Collagen VD
- Chronic infection
- Marrow recovery

REFER TO CCMB HEMATOLOGY

NO

YES

Treat and Observe for recovery

Concerning Features
- Count >50
- Promyelocytes and myelocytes
- Dysplasia
- Basophilia
- Splenomegaly
- NOT associated with acute infection

NO

YES

Reactive causes
e.g. Infection / inflammation, autoimmune, drugs esp. steroids

NO

YES

REFER TO CCMB HEMATOLOGY

Concerning Features
- Count >2 or increasing or persistent
- Dysplasia
- Anemia
- New organ damage
- NOT explained by infection, allergies or collagen vascular disease

NO

YES

Eosinophils ↑

Concerning Features
- Count >2 or increasing or persistent
- Dysplasia
- Anemia
- New organ damage
- NOT explained by infection, allergies or collagen vascular disease

NO

YES

Consider
- drugs
- Infections
- Allergies
- Collagen Vascular Disease

Treat and Observe for recovery

YES

NO

NO

YES

Refer to Lymphocytosis Pathway

NO

YES

NO

YES

George IT. Hematology. 475-484, 2012 (Adapted) June 16, 2016 (revised): ©Hematology DSG FINAL (Johnston & Banerji))

Pathways are subject to clinical judgment and actual practice patterns may not always follow the proposed steps in this pathway.
Work-Up of LYMPHOCYTOSIS

Lymphocytes >5 (persistent, > 2 CBCs over 3 months)

Blood Smear AND History & Physical Exam
include nodes and spleen

Any of these Concerning Features
- Lymphocytes >30
- Hgb <110, PLT <100
- Night sweats/weight loss
- Splenomegaly
- Lymphadenopathy

Flow Cytometry

IF Persistent Lymphocytosis
AND Assistance required to interpret flow cytometry

CALL CANCER QUESTION HELPLINE
204-226-2262

REFER TO
LYMPHOMA DSG

Asymptomatic

IF Persistent

Flow Cytometry

Clonal?

Rule out secondary causes

Normal / Polyclonal

REFER TO
LYMPHOMA DSG

Work-up for secondary causes
- Immunization
- Viral (eg. Hepatitis, CMV, EBV, adeno)
- Bacteria
- Drugs (eg. Steroids)
- Autoimmune
- Smoking
- Endocrine (eg. Myxedema, Addison’s, hypopituitarism)
- Splenectomy
- Stress

“Reactive” Lymphocytes
Patient symptoms of infection or acute illness

Strati and Shanafelt, Blood, 454-462 (Adapted) June 6, 2016: ©Hematology DSG FINAL (Johnston & Banerji)


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