ALPS Diagnostic Testing Algorithm

Patient presents with clinical suspicions of ALPS:

1) Chronic, non-malignant, lymphadenopathy and/or splenomegaly
2) ALPS Panel: double-negative T cells (DNTC) increased
3) Biomarker testing abnormal (IL-10, sFasL, IL-18, vitamin B12)

Abnormal: Genetic Testing Algorithm Options

Abnormal:
ALPS panel by NGS (includes *CASP8, CASP10, FADD, FAS, FASLG, NRAS, KRAS)*

Normal

Somatic *FAS* mutation in sorted DNTC

Normal

Abnormal:
Test *FAS* mutation

Somatic *FAS* mutation in sorted DNTC

CASP10 mutation

FASLG mutation

Apoptosis (Fas-mediated) assay

Abnormal:
ALPS of unknown genetic diagnosis

Normal:
Stop- consider alternate diagnosis (caution if patient is on immunosuppression)

Normal:
ALPS unlikely. In the absence of immunosuppressive medications, consider alternate diagnosis.

DIL Requisition:

ALPS Panel (by flow cytometry) and Biomarker Testing: IL-18, sFasL, and IL-10 (IL-10 as a part of the Plasma Cytokine panel).

Apoptosis (Fas-mediated): Must be <24 hours old and received on Thursdays by 11am.

Molecular Genetics Requisition:

Somatic *FAS* in DNTC **MUST** be scheduled. Please call 513-636-4685 to schedule this test.

Cincinnati Children's

For additional information or for test requisitions, please visit us at our website:

cincinnatichildrens.org/dchi