Evaluation of Potential Anaplastic Large Cell Lymphoma Cases

Morphology suggests ALCL, order 70012 / Pathology Consultation

Stains recommended: H&E, CD2, CD3, CD4, CD5, CD7, CD8, CD20, CD30, ALK-1, Granzyme B, p63, TCR-BF1, TCR-gamma delta, TIA-1

CD30 positive and ALK-1 positive
Diagnostic for ALCL, ALK positive
Skin Involvement?

YES
Consider primary cutaneous ALCL

NO
Systemic ALCL, ALK positive

CD30 positive and ALK negative
Morphology and phenotype diagnostic of ALCL
Skin Involvement?

YES
Review p63 IHC

NO
Consider other PTCL types

p63 >30% positive
Order:
- IRF4F / Cutaneous Anaplastic Large Cell Lymphoma, 6p25.3 (DUSP22 or IRF4) Rearrangement, FISH, Tissue
- TP63F / Peripheral T-Cell Lymphoma (PTCL), TP63 (3q28) Rearrangement, FISH, Tissue

TP63 FISH positive
DUSP-22 positive or negative
Skin Involvement?

NO
Systemic ALCL, ALK negative
- High risk for adverse outcome

YES
Consider primary cutaneous ALCL

TP63 FISH negative
DUSP-22 negative
Skin Involvement?

NO
Consider primary cutaneous ALCL

YES
Systemic ALCL, ALK negative
- Intermediate prognosis

TP63 FISH negative
DUSP-22 positive
Skin Involvement?

YES
Consider primary cutaneous ALCL

NO
Systemic ALCL, ALK negative
- Favorable prognosis

DUSP-22 positive
Skin Involvement?

YES
Consider primary cutaneous ALCL

NO
Systemic ALCL, ALK negative
- Intermediate prognosis

DUSP-22 negative
Skin Involvement?

YES
Systemic ALCL, ALK negative
- High risk for adverse outcome

NO
Consider primary cutaneous ALCL

ALCL=Anaplastic large cell lymphoma
PTCL=Peripheral T-cell lymphoma
H&E=Hematoxylin and eosin
IHC=Immunohistochemistry