Classification and Diagnostic algorithm for Primary Lymphatic Dysplasia

Start

Syndromic

Yes

Unknown syndrome

No

Systemic/visceral involvement pre- or postnatal onset

Yes

Known syndrome, e.g. Noonan and Turner

No

Some segments

Yes

Multisegmental lymphatic dysplasia with systemic involvement (MLDSI)

No

All segments

Yes

Generalized lymphatic dysplasia (GLD)/Hennekam syndrome

Consider CCBE1, FAT4, PIEZO1

No

Lymphatic-related hydrops fetalis (LRHF)

Consider PIEZO1, EPHB4

Distichiasis

Yes

Lymphedema-distichiasis syndrome

FOX2

No

Late onset (>1 y)

Distichiasis

Yes

Unilateral

Lymphedema

Late-onset unilateral leg lymphedema

Bilateral

Meige-like

FH -ve

Meige

Consider GJC2

FH +ve

Late-onset unisegmental lymphedema

Lower limbs only

Yes

FH +ve

Late-onset multisenstamental lymphedema

Meige

Lower limbs ± genitalia

Consider GATA2

FH -ve

Late-onset lower limbs

4-limb

Consider GJC2, Turner

Congenital lower limb edema with reflux and rerouting

Unilateral

Meige

Consider GJC2

Bilateral

Lower limb

FH -ve

Late-onset unisegmental lymphedema

FH +ve

Late-onset multisenstental lymphedema

Lower limb + genitalia

Consider PIEZO1

Congenital lower limb + genital edema

Multiple segments

Congenital multisenstental edema without systemic involvement

Congenital unisenstental edema

WILD syndrome

Proteus syndrome

AKT1

PIK3CA Related Overgrowth Spectrum (PROS)

- CLOVES
- Fibroadipose hyperplasia
- KTS / KT-like
- Lymphatic malformation
- Combined vascular malformation

PIK3CA

Parkes-Weber syndrome

RASA1

Progressive lymphangiomatosis

Gorham syndrome

Generalised lymphatic anomaly

Unknown syndrome

Bilateral

Late-onset unilateral leg lymphedema

FH +ve

Late-onset lower limbs ± genitalia

Consider GATA2

FH -ve

Late-onset multisenstental lymphedema

4-limb

Consider GJC2, Turner
This algorithm relates to the following papers:
