

Plasminogen Deficiency, Type 1: For Obstetrics/Gynecology



Overview of Plasminogen Deficiency (PLGD)

- PLGD Type 1: a quantitative protein deficiency, with decreased plasminogen activity and decreased antigen
 - Due to a genetic mutation in the gene for plasminogen; > 50 different mutations have been identified; Autosomal Recessive inheritance
 - Most common presenting symptom is ligneous conjunctivitis, but multi-organ, systemic disease that can be life-threatening
- PLGD Type 2: reduced functional activity of plasminogen, but normal antigen levels; patients are asymptomatic

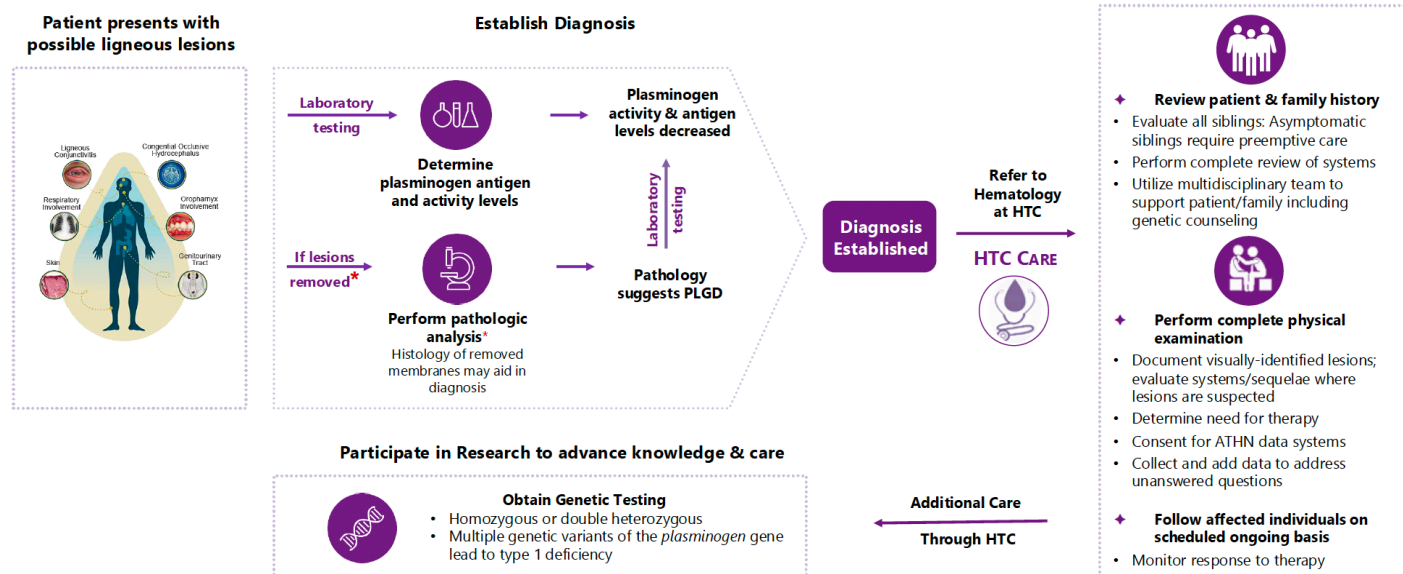
	Normal	PLGD Type 1	PLGD Type 2
Plasminogen Activity	70-130%	Decreased	Decreased
Plasminogen Antigen	6-25 mg/dL	Decreased	Normal
For Patients: My Plasminogen Activity			

Diagnosis

- Complicated by heterogeneous symptoms; symptoms can wax and wane
- Mucosal surfaces of the eyes, ears, nose, gums, airways, lungs, GI tract, kidneys, GU tract, CNS, and skin can all be affected
- Initial point of medical contact therefore includes many disciplines

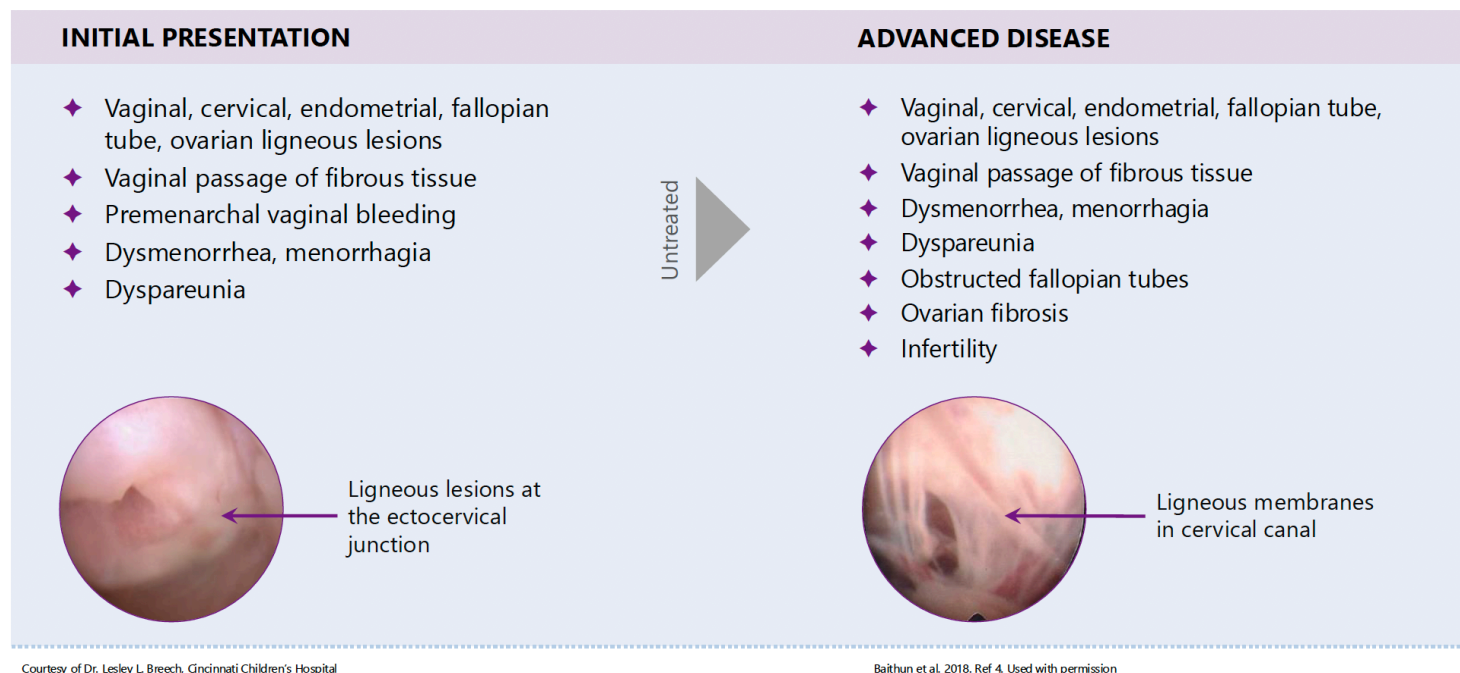
Treatment

- Ryplazim (plasminogen, human-tvmh) given by IV infusion leads to resolution of lesions
- Surgical removal of lesions, though initially helpful, leads to accelerated regrowth
- Referral to a Hemophilia Treatment Center (HTC) to serve as medical home, and:
 - Educate on product use
 - Ongoing symptom monitoring, outcomes, safety
 - Administer doses, determine dosing schedule
 - Teach home infusion



*Lesion removal prior to diagnosis not recommended

Obstetrics / Gynecology Specific Diagnostic Findings



Obstetrics / Gynecology Specific Treatment Considerations

- New or suspected diagnosis:
 - Obtain diagnostic blood test (plasminogen activity level) or refer to hematologist to order
 - If confirmed, refer to HTC to establish care and perform thorough review of systems
 - Patients may have more than one system affected at presentation or occurring over time
- Confirmed diagnosis:
 - Coordinate clinical care and collaborate closely with existing care team at HTC
 - Manage procedures, pregnancies, and surgeries in close collaboration with HTC
- Be suspicious of common diagnoses:
- Dysmenorrhea and irregular abnormal menses might be due to ligneous lesions
- Persistent vaginal discharge or passage of vaginal tissue may be a premenarchal symptom of PLGD
- In patients with type 1 plasminogen deficiency, GU complications can occur
 - Vaginal, cervical, uterine, tubal, and ovarian lesions
 - Abnormal fallopian tube morphology
 - Ovarian disease
- Approximately 27% of females of childbearing age with PLGD are diagnosed with infertility
- Pregnancy in PLGD patients should be considered high risk

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