

Chronic GVHD Distinctive features

- Seen in chronic GVHD, but insufficient alone to establish a diagnosis of chronic GVHD
- In all cases, infection, drug effect, malignancy, or other causes must be excluded.

Organ and distinctive signs	Other Causes / Confirmation
Skin	
Depigmentation (Vitiligo)	Features contribute to the diagnosis of chronic GVHD in combination with biopsy or laboratory confirmation of GVHD in skin or another organ. Requirement for confirmation: biopsy documenting histological features of chronic GVHD (at least „likely“ cGVHD)
Papulosquamous lesions	
Nails	
Dystrophy consisting of longitudinal ridging, splitting or brittle features	Exclusion of other causes of nail dystrophy: <ul style="list-style-type: none"> • Subungual infections/onychomycosis from dermatophytes, yeasts (eg, <i>Candida albicans</i>), or bacteria (including <i>P. aeruginosa</i> and <i>S. aureus</i>). • Tumor in proximal nail fold or nail bed • Trauma • Habitual nail picking • personal history of psoriasis • allergic or irritant contact dermatitis • yellow nail syndrome. • subungual squamous cell carcinoma in chronic unexplained onycholysis affection only one nail Requirement for confirmation: evaluation by a dermatologist and exclusion of other causes (see above)
Onycholysis	
Pterygium unguis	
Nail loss (usually symmetric, affects most nails)	

Scalp and body hair	
New onset of scarring or nonscarring scalp alopecia (after recovery from chemoradiotherapy)	<p>After evaluation by a specialist (usually dermatologist) and exclusion of alternative causes, like:</p> <ul style="list-style-type: none">• Malnutrition• Endocrine disorders (thyroid disorders, estrogen deficiency)• iron deficiency• toxic (poisoning: eg. arsenic, mercury) or drug related, eg. Amiodarone, Anticoagulants, Anticonvulsants, Captopril, Cholesterol lowering drugs, Propranolol, etc. <p>Requirement for confirmation: evaluation by a dermatologist and exclusion of other causes (see above)</p>
Loss of body hair	
Scaling	
Mouth	
Xerostomia	<p>Exclusion of herpes simplex, or Candida albicans infections of the oral cavity, drug toxicity and malignancies (if ulcers). Measurement of saliva production.</p> <p>Requirement for confirmation: exclusion of infection by appropriate tests and malignancy by biopsy. Evaluation by dentist or otolaryngologist</p>
Mucocele	
Mucosal atrophy	
Ulcers	
Pseudomembranes	
Eyes	
New onset dry, gritty, or painful eyes	<ul style="list-style-type: none">• evaluation by an ophthalmologist experienced in posttransplant care to exclude other causes• new ocular sicca documented by low Schirmer's test• new onset of KCS by slit lamp exam with Schirmer's test <p>Requirement for confirmation: evaluation by ophthalmologist + pathological Schirmer's test (with/without split lamp)</p>
Cicatricial conjunctivitis	
KCS	
Confluent areas of punctate keratopathy	

Genitalia	
Erosions	<p>Evaluation by an gynecologist experienced in posttransplant care to exclude other causes Including hormonal deficiency, infections, toxic/mechanical irritations or malignancies.</p> <p>Requirement for confirmation: evaluation by gynecologist + biopsy documenting histological features of chronic GVHD (at least „likely“ cGVHD)</p>
Fissures	
Ulcers	
Lung	
Air trapping and bronchiectasis on chest CT	<p>If BOS is the only clinical manifestation in a patient without a prior established diagnosis of chronic GVHD, air trapping and bronchiectasis on CT scan are not sufficient to establish the diagnosis of cGVHD. In this situation a lung biopsy is required to establish the diagnosis of chronic GVHD.</p> <p>Requirement for confirmation: biopsy documenting histological features of chronic GVHD (at least „likely“ cGVHD) if only clinical manifestation in a patient without a prior established diagnosis of chronic GVHD</p>
Muscles, fascia, joints	
Myositis or Polymyositis	<p>For diagnosis of chronic GVHD biopsy required in absence of other manifestations of cGVHD to exclude other causes of myositis, incl. drug induced myositis</p> <p>Requirement for confirmation: muscle biopsy documenting histological features of chronic GVHD (at least „likely“ cGVHD)</p>