



### ***Graft Versus Host Disease***

GVHD occurs in situations in which donor immunocompetent T cells transferred into allogenic hosts are

infrequently, unirradiated blood products , solid organ transplants , and maternal-fetallymphocyte engraftment

The disease can be divided into an acute and a chronic phase. Acute GVHD typically occurs between 7

In the *acute phase*, the classic triad includes skin lesions, hepatic dysfunction,

In the *chronic phase*, an early lichenoid stage and a late sclerodermoid stage



histopathology

the early changes in the acute phase consist of focal basal vacuolation and sparse superficial

perivascular lymphocytic infiltrate with exocytosis of individual cells into the epidermis. The epider-

In the *chronic phase*, the early lichenoid stage may still show evidence of satellite





In the late sclerodermoid phase, the epidermis is atrophic, with the keratinocytes being small, flattened,

*IF Testing.*

Epithelial basement membrane zone granular IgM and complement deposition is

*Pathogenesis.*

Acute and chronic forms of the disease have a different pathogenesis. In acute

The greater the disparity between donor and recipient MHC, the greater the T-cell response. Secondary

The inflammatory cytokines (ILs, GM-CSF, TNF- $\alpha$ , IFN- $\gamma$ ) produced by activated T cells and by tissue damage

mechanisms by which the skin, liver, and gastrointestinal tract are targeted are not clear.

Less is understood about the pathophysiology of chronic GVHD. The role of donor T cells against the re-

*Ultrastructural Study* .

The necrotic keratinocytic cytoplasm is filled with numerous aggregated tonofilaments.



*Differential Diagnosis.*

The acute phase of GVHD is similar to EM, with scattered necrotic keratinocytes and the formation of s

The

*eruption*

of

*lymphocyte recovery*

occurs



Distinguishing between the lichenoid lesions of GVHD and lichen planus is often impossible.

However, late sclerotic lesions can be differentiated from scleroderma by the marked atrophy of

the epidermis. Active synthesis of collagen takes place largely in the upper third of the dermis;

in scleroderma, collagen is synthesized mainly in the lower dermis and in the subcutaneous

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