

Table S1. Banff 2007 VCA grading system and grading system used to score our biopsies based on the presence of acute vascular lesions.

Banff 2007 working classification of skin-containing composite tissue allograft pathological grading system [2]		Grading system used to score our biopsies
Grade 0 (No Rejection)	No or rare inflammatory infiltrates.	Grade 0: No to mild perivascular inflammatory infiltrates in the superficial dermis ^a
Grade I (Mild Rejection)	Mild perivascular infiltration. No involvement of the overlying epidermis.	Grade I without lymphocytic vasculitis: Mild perivascular infiltration involving at least mid dermis. No involvement of the overlying epidermis.
		Grade I with lymphocytic vasculitis: Mild perivascular infiltration involving at least mid dermis. Presence of lymphocytic vasculitis^b with or without fibrin deposition in small or medium vessels^c of the dermis or hypodermis. No involvement of the overlying epidermis.
Grade II (Moderate Rejection)	Moderate-to-severe perivascular inflammation with or without mild epidermal and/or adnexal involvement (limited to spongiosis and exocytosis). No epidermal dyskeratosis or apoptosis.	<i>Idem.</i>
Grade III (Severe Rejection)	Dense inflammation and epidermal involvement with epithelial apoptosis, dyskeratosis and/or keratinolysis.	<i>Idem.</i>
Grade IV (Necrotizing Acute Rejection)	Frank necrosis of epidermis or other skin structures.	<i>Idem.</i>

^aBanff grade 0 was defined as no to mild perivascular inflammatory infiltrates in the superficial dermis, as common dermatosis such as rosacea and seborrheic dermatitis are associated with mild superficial perivascular infiltrates. Mild perivascular infiltration involving at least mid dermis was the minimum criteria to score biopsies as grade I.

^bLymphocytic vasculitis was defined as the presence of inflammatory cells, mainly lymphocytes, in the subendothelial space of vessels.

^cSmall or medium size vessels in the skin consist of venules, arterioles, small and medium size veins and small and medium size arteries. Medium size vessels are usually found at the dermo-hypodermic junction or in the hypodermis (subcutaneous fat).

Table S2. Immunohistochemical characterization of the inflammatory infiltrate according to the presence of lymphocytic vasculitis

	Grade 0 (n=10)	Grade I without vasculitis (n=19)	Grade I with vasculitis (n=5)	Total (n=34)	<i>P value</i> ^b
Number of biopsies with IHC	3 (30%)	15 (79%)	5 (100%)	23 (68%)	
Mean % of inflammatory cells ± SD					
T lymphocytes	67 ± 15 %	73 ± 15 %	74 ± 24 %	72 ± 16 %	0.851 ^a
CD4 T lymphocytes	23 ± 7 %	21 ± 11 %	24 ± 15 %	22 ± 11 %	0.927 ^a
CD8 T lymphocytes	45 ± 16 %	53 ± 16 %	50 ± 13 %	51 ± 15 %	0.726 ^a
B lymphocytes	7 ± 4 %	18 ± 15 %	12 ± 9 %	15 ± 13 %	0.331 ^a
Histiocytes	44 ± 18 %	31 ± 16 %	15 ± 5 %	30 ± 17 %	0.060 ^a
Inflammatory cells ratio					
T lymphocytes : B lymphocytes ratio	2:1	3:1	5:1	3:1	0.008 ^a
T lymphocytes : Histiocytes ratio	13:1	7.:1	10:1	8:1	0.343 ^a
CD8 T : CD4 T ratio	2:1	3:1	3:1	3:1	0.661 ^a
Biopsies with C4d vascular deposits ^a	0	0	0	0	

^a*P* values are comparison between Grade 0, Grade IA and Grade IB.

^bThe statistical tests have not been adapted for single patient analysis with repeated measures. However, we still employed them as a means of quick comparison between groups.

IHC: immunohistochemistry

Table S3. Comparison of clinical and pathological findings over time periods

	Period I (POD 0-89)	Period 2 (POD 90-179)	Period 3 (POD 180-279)	Period 4 (POD 280-369)	Period 5 (POD 370-430)	Total
Clinical data						
Mean \pm SD tacrolimus levels (μ g/L)	13 \pm 5	16 \pm 5	18 \pm 8	15 \pm 4	8 \pm 6	15 \pm 6
Sub-therapeutic tacrolimus episodes	0	0	1	0	1	2
Erythema episodes	1 (solar erythema)	0	0	0	0	1 (solar erythema)
Protocol biopsies						
Biopsies performed	12	12	5	4	1	34
Grade 0	5 (42 %)	3 (25 %)	2 (40 %)	0 (0 %)	0 (0 %)	10 (29 %)
Grade I <i>without</i> vasculitis	5 (42 %)	8 (67 %)	3 (60 %)	3 (75 %)	0 (0 %)	19 (56 %)
Grade I <i>with</i> vasculitis	2 (17 %)	1 (8 %)	0 (0 %)	1 (25 %)	1 (100 %)	5 (15 %)
Grade II	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
Nature of inflammatory infiltrate						
Biopsies with IHC (%)	8/12 (67 %)	6/12 (50 %)	3/5 (60 %)	4/4 (100 %)	1/1 (100 %)	22/34 (65 %)
Rejection biopsies with IHC (%)	7/7 (100 %)	6/9 (67 %)	2/3 (67 %)	4/4 (100 %)	1/1 (100 %)	20/24 (83 %)
Mean % of inflammatory cells ^a \pm SD						
T lymphocytes	78 \pm 16 %	68 \pm 19 %	68 \pm 9 %	70 \pm 20 %	77 % ^c	72 \pm 16 %
CD4 T lymphocytes	21 \pm 7 %	21 \pm 13 %	16 \pm 6 %	29 \pm 17 %	18 % ^c	22 \pm 11 %
CD8 T lymphocytes	43 \pm 24 %	46 \pm 17 %	51 \pm 14 %	45 \pm 11 %	57 % ^c	51 \pm 15 %
B lymphocytes	18 \pm 13 %	21 \pm 19 %	9 \pm 3 %	6 \pm 3 %	23 % ^c	16 \pm 13 %
Histiocytes	43 \pm 19 %	22 \pm 8 %	31 \pm 9 %	20 \pm 10 %	11 % ^c	30 \pm 17 %
Inflammatory cells ratio						
T lymphocytes : B lymphocytes ratio	7:1	7:1	8:1	15:1	3:1	9:1
T lymphocytes : Histiocytes ratio	2:1	3:1	2:1	5:1	7:1	3:1
CD8 T : CD4 T ratio	3:1	3:1	4:1	3:1	3:1	3:1
Biopsies with C4d vascular deposits ^b	0	0	0	0	0	0

^aThe number of inflammatory cells (T and B lymphocytes, histiocytes) was measured on the histologic level that showed maximal inflammation.

^bPositive C4d staining was defined as Cd4 endothelial deposits in vessels.

^cSingle sample, no standard deviation.

POD: post-operative day, IHC: immunohistochemistry