

Best of Allergology
2025
Medicament

Gustavo Machado

A new epidemic of doxycycline-induced fixed drug eruption (FDE)



- 15 cases (11 in last 6 months)
- Doxycyclin** for post exposure prophylaxis (PeP) or sexual transmitted infections (STIs)
- 100% improved after discontinuation
- PT positive 1/3
- ROAT positive 11/14
- Doxy in petrolatum* in oral or genital mucosa
- OPT new flare up in 3 (100%)
- 90% men: genital lesions (bullus/ulcer/eritema)
- Physicians should be aware in genital ulcers:**
- Diferenciacion of STI**
- ROAT or PT: avoid OPT**

TABLE 1 Clinical characteristics of included patients.

N°	Sex	Age	Previous exposure to cyclins ^a	Reason for using doxycycline	Delay after intake	Clinical involvement	Number of flare-up	PT	In situ ROAT	OPT
1	M	38	Yes	STI	12 H	Glans only, bullous	2	NA	+	NA
2	M	27	Yes	STI	48 H	Glans, lip and cutaneous (hands, arms). Bullous	2	-	-	+
3	M	37	NA	STI	24 H	Glans only	1	NA	+	NA
4	M	26	NA	STI	24 H	Glans only, bullous	2	-	+	NA
5	F	28	No	Horse bite	1 H	Cutaneous (hands, feet, face)	3	+	-	NA
6	M	29	Yes	STI	48 H	Glans and tongue	2	NA	+	NA
7	M	32	Yes	PeP	1 to 48 H	Glans, lip and cutaneous (hand/feet). Bullous	4	NA	+	NA
8	M	38	Yes	PeP	24 H	Glans and penis Bullous	3	-	-	+
9	M	50	Yes	STI	2 H	Glans and lip Bullous	4	NA	-	+
10	M	41	Yes	STI	24 H	Glans only, bullous	4	NA	+	NA
11	M	31	Yes	STI	1 H	Glans, lip and anus	3	NA	+	NA
12	M	49	Yes	STI	72 H	Glans only, bullous	4	NA	+	NA
13	M	27	Yes	STI	72 H	Glans only, bullous	1	NA	+	NA
14	M	47	Yes	STI	24 H	Glans and penis Bullous	3	NA	+	NA
15	M	25	Yes	PeP	48 H	Glans only, bullous	1	NA	+	NA

Abbreviations: -, Negative; +, Positive; Doxy, Doxycycline; F, Female; H, Hours; M, Men; NA, Not applicable or No Available; OPT, Oral Provocation Test; PeP, Post-exposure Prophylaxis; PT, Patch Test; ROAT, Repeat Open Application Test; STI, Sexual Transmitted Infection.

^aPrevious exposure to cyclins (for STI treatment), well-tolerated (without FDE eruption).

Topical versus oral corticosteroids in moderate DRESS

- **DRESS CODE Study:**
- RCT assessing superiority of topical CS vs systemic CS in moderate DRESS during 30 days
 - Clobetasol 30g vs prednisone 0.5mg/kg
- 112 expected patients but only 52 inclusion (26 each group)
- Early stop:
 - 2 deaths (1 each group);
 - 6 patients in TSC group (23%) worsen >>> Rescue with high dose SCS

Table 1: Criteria for moderate and severe DRESS used in our RCT

Criteria for moderate severity DRESS

At least one visceral involvement of intermediate severity according the following criteria:

- Liver: transaminases between 4 and 15 folds above the normal values (N), alkaline phosphatase between 3 and 5 N and Factor V >50%

- Kidney: organic kidney insufficiency with sudden increase of creatinemia over 26.4 $\mu\text{mol/L}$ or 1.5 N or oliguria < 0.5 mL/kg/h

- Blood cell count: hemoglobin between 7 and 10 g/dL and/or neutrophils between 500 and 1500/mm³ and/or platelets between 50,000 and 100,000/mm³

- Lungs: interstitial pneumonia with PaO₂ 60-75mmHg, without rest dyspnoea

AND no cardiac, neurological, or digestive life-threatening involvement

Criteria for severe DRESS*

At least one of the following criteria:

- Liver: transaminases >15 folds above the normal values (N), alkaline phosphatase >5 N and Factor V <50%

- Kidney: rapidly progressive organic kidney or oligo-anuria

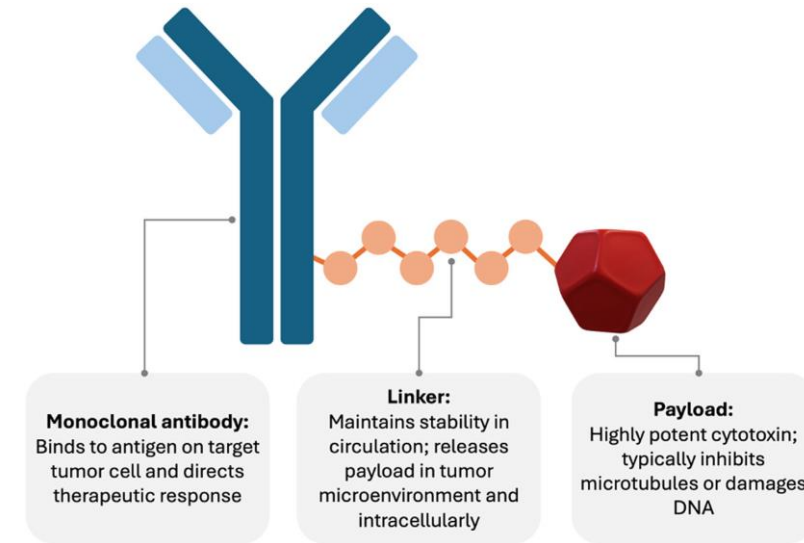
- Lungs: interstitial pneumonia with PaO₂ <60mmHg

- Myocarditis, neurological, digestive involvement, pancytopenia, multi-organ failure, hemophagocytosis

**In our study, patients who worsened and achieved criteria of severe DRESS were treated according to the investigator decision. In routine practice, at the time of the study, treatment of severe DRESS could include high doses of corticosteroids (1 mg/kg/day), intravenous immunoglobulins, and/or antiviral agents.*

Dermatologic toxicities of antibody-drug conjugates

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CAPSULE SUMMARY

- Antibody-drug conjugates are a novel category of targeted oncologic treatments that are increasingly utilized in solid and liquid tumors.
- Antibody-drug conjugates can have wide-ranging dermatologic toxicities including low-grade morbilliform rashes, alopecia, photosensitive eruptions, flexural exanthems, and rarely Stevens Johnson Syndrome that are essential for dermatologists to recognize and manage.

✓ Antibody-drug conjugates (ADC) :

Oncologic tx

Target specificity (mAb) +
cytotoxic payload

- Unique toxicities: skin and organs
- 11 ADCs FDA approved (2024)
- 80 ADCs in clinical development
- *Urge to understand*

❑ mAbs may have cytotoxic effect

❑ Linkers may be cleavable or not

❑ Alopecia

❑ Stomatitis

❑ Morbilliform

❑ Bullous

❑ Acneiform

❑ Exfoliative rashes

❑ SJS/TEN (rare)

Antibiotic allergy de-labeling in the intensive care unit: The prospective ADE-ICU study

- Patients in ICU are frequently prescribed antibiotics
 - Many patients reports antibiotic allergy
 - Mislabeling contributes to suboptimal antibiotic use
 - Antibiotic allergy assessment and testing in ICU
 - Eligible patients: non-immune mediated drug reaction
-
- Results
 - Antibiotic de-labelling 48 of 51 (94%)
 - High risk 11 patients (not tested)
 - No adverse events occurred from testing

Table 4

Impact of de-labeling on antibiotics prescribed to de-labeled patents receiving antibiotics ($n = 36$).

Characteristics of antibiotics prescribed	Before De-labeling – No. (%)	After De-labeling – No. (%)
Antibiotic prescribed		
Penicillin	5 (14)	23 (64)
Cephalosporin	8 (22)	7 (19)
Carbapenem	12 (33)	6 (17)
Fluoroquinolone	4 (11)	0 (0)
Macrolide	7 (19)	6 (17)
Monobactam	5 (14)	1 (3)
Metronidazole	7 (19)	3 (8)
Clindamycin	3 (8)	2 (6)
Aminoglycoside	2 (6)	2 (6)
Glycopeptide	15 (42)	11 (31)
Linezolid	1 (3)	1 (3)
Co-Trimoxazole	1 (3)	1 (3)
Number of antibiotics being administered to patients simultaneously		
1	11 (31)	17 (47)
2	17 (47)	12 (33)
3	6 (17)	6 (17)
4	2 (6)	1 (3)

Antibiotic allergy de-labeling in the intensive care unit: The prospective ADE-ICU study

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Acute generalized exanthematous pustulosis (AGEP): European expert consensus for diagnosis and management

- o Lack of consensus for diagnose and management
- o Recommendations from specialists members from Toxi-TEN group
- o Multidisciplinary approach: Dermatologist and Allergologist
- o Exams and support
- o Topical corticosteroids adults and child
- o Severe: Same as TEN

TABLE 1 AGEP validation score of the EuroSCAR study group.¹

Morphology	Pustules	Typical ^a	+2
		Compatible ^b	+1
		Insufficient ^c	0
	Erythema	Typical	+2
		Compatible	+1
		Insufficient	0
	Distribution/pattern	Typical	+2
		Compatible	+1
		Insufficient	0
Post-pustular desquamation	Yes	+1	
	No/insufficient	0	
Course	Mucosal involvement	Yes	-2
		No	0
	Acute onset (≤10 days)	Yes	0
		No	-2
	Resolution (≤15 days)	Yes	0
		No	-4
	Fever ≥38°C	Yes	+1
		No	0
	Neutrophils ≥7000/mm ³	Yes	+1
		No	0
	Histology	Other disease	-10
		Not representative/no histology	0
Exocytosis of neutrophils		+1	
Subcorneal and/or intraepidermal non spongiform or NOS pustule(s) with papillary oedema or subcorneal and/or intraepidermal spongiform or NOS pustule(s) without papillary oedema		+2	
Spongiform subcorneal and/or intraepidermal pustule(s) with papillary oedema		+3	

Interpretation: ≤0: no AGEP; 1-4: possible; 5-7: probable; 8-12: definite.