DRESS Syndrome With Bilateral outer macular involvement: A Case of acute visual loss

Nain Tara Raja, Dr Rosie Brennan, Dr Niku Dhillon

Background

Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) is a rare, severe, multi-organ hypersensitivity reaction.
Lamotrigine is a well-documented trigger.
Ocular involvement is uncommon, and macular scarring is extremely rare.
This case describes rapid bilateral central visual loss secondary to DRESS syndrome in a young adult.

Case Presentation

Patient: 24-year-old female with a history of psoriasis
Medication: Lamotrigine for one month, prescribed as a mood stabiliser
Timeline of Symptoms:
09 Oct - Lamotrigine commenced
09 Nov - lamotrigine discontinued
12 Nov - Oral prednisolone 40mg commenced
02 Nov – Truncal morbilloform rash → spreading to face and full body over 6 days
5–11 Nov – Fever, dizziness, fogginess, general malaise; rash worsened with pressure
11 Nov – New onset of black spots in vision
12 Nov - WCC 11.7, CRP 99, ALT 129, AST 84, Bilirubin 10.
12 Nov – Diagnosed with DRESS syndrome, started on Prednisolone 40 mg daily
20 Nov - Progressive visual symptoms: difficulty recognising faces, floaters, and significantly blurred vision

Ophthalmic Examination

Visual Acuity (18/11/2025) - 6/20 unaided either eye
Visual Acuity (20/11/2025) - 6/12 unaided either eye
Anterior Segment
Conjunctival injection 11 Nov, resolved day 18 Nov
Lenses clear
No anterior or posterior chamber activity
Posterior Segment
Bilateral discrete islands of macular RPE change
OCT patches of change in the outer nuclear layer, external limiting membrane, ellipsoid zone and retinal pigment epithelium
No retinal vasculitis. Normal peripheral retina
Findings consistent with possible choroiditis or retinal pigment epitheliopathy secondary to an immune reaction to Lamotrigine

Management

Lamotrigine discontinued
Initiated on Prednisolone 40 mg for X days, with tapering over X weeks
Dermatology and ophthalmology joint follow-up
Referral to:
Eye Care Liaison Officer
Sensory Support Services
Monitoring for progression of macular scarring and visual function

Discussion

•DRESS syndrome typically affects skin, liver, kidneys, and haematologic systems.
•Ocular involvement is rare, with macular RPE damage being exceptionally unusual.
•In this case, visual symptoms developed in parallel with systemic deterioration. (Add all other eye findings mentioned in literature)
•The pattern of early macular scarring suggests direct inflammatory damage, possibly exacerbated by systemic immune dysregulation.
•Early ophthalmic assessment is critical in DRESS patients reporting visual symptoms.

Images

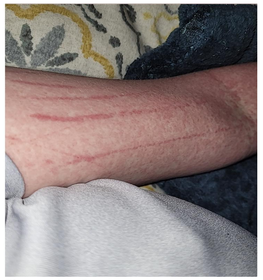


Figure 1 – Rash on arm (occurred with pressure) – 11 Nov

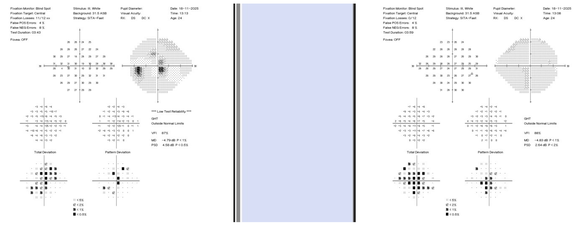


Figure 2 – RE and LE Visual Field - 18 Nov

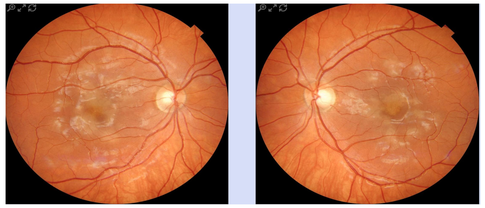
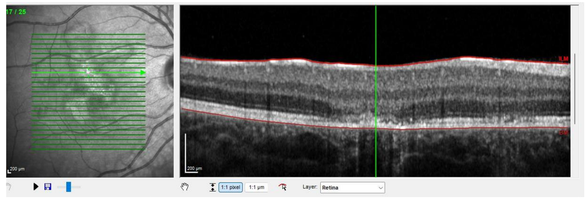


Figure 3 – Right and Left Eye - 18 Nov



Conclusion

This case highlights a rare but significant ophthalmic complication of Lamotrigine-induced DRESS syndrome. Bilateral outer macular inflammation led to significant central vision loss, which fortunately improved with treatment. Early recognition, urgent ophthalmic referral, and multidisciplinary management are essential to preserve visual outcomes.