extracted from the PathWest laboratory information system and clinical database. ANA assays were performed by indirect immunofluorescence. ENA requests were screened by ELISA and characterised by immunoblot.

Results: We identified 643 patients with an average age of 54, of whom 174 were male (27%). There were 1111 antibodies found in total. Ro-52 antibodies were the most common (29%), followed by SSA detected by IIF (19%), Ro-60 (18%), SSB (8%), Histone (4%), Scl-70 (4%), Smith (4%) and Jo-1 (4%). Other antibodies were all <1% (CenpB, RNP and Ribo-P). In total there were 459 patients that had only 1 ENA specificity (71%), 121 had 2 (19%), 55 had 3 (9.2%) and 8 had 4 (1.2%). Multiple clinic-pathological associations were found which will be discussed.

Discussion: Previous studies have identified patients with positive ENA and clinical autoimmune disease despite negative ANA.¹ Our study confirms this finding within our referral population. Patients with a high pre-test probability for autoimmune disease should have ENA testing performed regardless of ANA results.

Reference

1. Davis JM 3rd, Moder KG, Homburger HA, *et al.* Clinical features of 39 patients with antibodies to ENA despite negative ANA: evidence for autoimmunity, including neurologic and connective tissue diseases. *Medicine* 2005; 84: 208–17.

WITH 'COMPLEMENTS' TO OCCAM'S RAZOR

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We describe a case of a previously well 43-year-old woman with pre-existing mild Sjogrens syndrome who presented with a severe, rapidly progressive SRP positive necrotising autoimmune myositis (NAM) causing eventual quadriplegia and treated with multiple immunosuppressives and Rituximab. In the course of this illness she developed a fulminant non-shiga toxin associated haemolytic uraemic syndrome (HUS) that was refractory to plasmapheresis and was only arrested with the C5a inhibitor eculizumab. Concurrent atypical HUS and NAM has not been described previously, both being rare disorders but possibly unified by involvement of the alternate complement pathway. In aHUS, uncontrolled complement activation is usually secondary to underlying genetic defects in regulatory proteins (Factor H, Factor I and membrane cofactor protein) or defects in Factor B, C3 with a 'second hit' caused by autoantibodies against complement regulatory proteins or infectious triggers. Investigations to date in this patient have shown low Factor I levels but known Factor I mutations have not been detected to date. We explore the possible ways in which autoimmunity or SRP-associated complement activation may have played a role in susceptibility to aHUS in this case and broader implications for complement-mediated disease.

VALIDATION OF A HLA-B*15:02 SCREENING METHOD IN THE PREVENTION OF CARBAMAZEPINE – INDUCED SEVERE CUTANEOUS ADVERSE REACTIONS

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Background: HLA-B*15:02 is strongly associated with carbamazepine (CBZ)-induced Stevens-Johnson syndrome/toxic epidermal necrolysis in Asians, thus screening for this allele is recommended. Our aim was to develop a widely applicable and cost-effective in-house assay for the detection of HLA-B*15:02.

Methods: 103 DNA samples were tested for validation. A novel multiplex SYBR real-time PCR using allele specific primers for HLA-B*15:02 was developed. Actin was used as an internal control. The dissociation curve was used to determine HLA-B*15:02 and actin. Results were compared with those obtained by Luminex SSO/SBT/SSP.

Results: From 103 samples tested, HLA-B*15:02 allele was detected in 10 samples showing two peaks at 91.3°C (B*15:02) and 80.9°C (actin), respectively. One false positive sample was detected when compared to Luminex. Our assay has 100% sensitivity, 99% specificity, PPV: 90% and NPV: 100%, respectively. The lowest limit of detection is 0.5 ng/μL DNA, rendering it suitable for low yield-samples. The unit cost is half compared to that of a commercial assay.

Conclusion: We have developed a rapid, robust and cost-effective method that produces no false negative results that can be used for the screening of HLA-B*15:02 prior to the initiation of treatment with CBZ in individuals with Asian ancestry.

A VERY RARE CASE OF INFECTIVE ENDOCARDITIS

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Introduction: *Microascus cinereus* fungal endocarditis in an immunocompetent person is a very rare occurrence. This dematiaceous fungus is normally found in soil and stored grains.

Case presentation: A normally well 64-year-old Indian male had for 5 months vague symptoms of breathlessness with on/off mild fever. Previous illnesses included diabetes mellitus, pulmonary nodules, cardiomyopathy, and heart block with permanent pace-maker insertion in India. He presented after 5 months