from Teva. Dr. Karni has received personal compensation in the range of $500-$4,999 for serving on a Scientific Advisory or Data Safety Monitoring board for Neopharm. Dr. Karni has received personal compensation in the range of $500-$4,999 for serving on a Scientific Advisory or Data Safety Monitoring board for BMS. Dr. Karni has received personal compensation in the range of $5,000-$9,999 for serving as an Expert Witness for Israeli Court. The institution of Dr. Karni has received research support from Medison. The institution of Dr. Karni has received research support from Sanofi. The institution of Dr. Karni has received research support from Novartis. The institution of Dr. Karni has received research support from Roche.

Comparison of Fixed Cell-based Assay to Radioimmunoprecipitation Assay for Acetylcholine Receptor Antibody Detection in Myasthenia Gravis

Ario Mirian, Michael Nicolle, Adrian Budhram

Objective

To compare specificity and sensitivity of a commercially available fixed cell-based assay (F-CBA) to radioimmunoprecipitation assay (RIPA) for acetylcholine receptor antibody (anti-AChR) detection in myasthenia gravis (MG).

Background

Approximately 50% of ocular and 85% of generalized MG are anti-AChR positive by RIPA, the current gold standard test. Clustered live cell-based assay (L-CBA) can detect low-affinity anti-AChR that are missed by RIPA, but the costly and time-consuming nature of L-CBA has restricted its use to specialized centres. A commercial F-CBA has become available for anti-AChR detection, but its diagnostic performance compared to RIPA requires evaluation.

Design/Methods

In this retrospective diagnostic cohort study we reviewed the clinical information of suspected MG patients evaluated at London Health Sciences Centre MG clinic, who were clinically classified as MG or non-MG and who had anti-AChR RIPA and then F-CBA performed. Classification of each patient as anti-AChR F-CBA-negative/positive, RIPA-negative/positive, and MG/non-MG permitted specificity and sensitivity calculations for each assay.

Results

Six-hundred-eighteen patients were included in study analysis. The median patient age at time of sample collection was 45.8 years (range: 7.5–87.5 years) and 312/618 (50.5%) were female. Of 618 patients, 395 (63.9%) were classified as MG. Specificity of both F-CBA and RIPA was excellent (99.6% vs. 100%, P > 0.99). One F-CBA-positive patient was classified as non-MG, although in retrospect ocular MG with functional overlay was challenging to exclude. Sensitivity of F-CBA was significantly higher than RIPA (76.7% vs. 72.7%, P = 0.002). Overall, 20/97 (21%) otherwise SNMG patients after RIPA evaluation had anti-AChR detected by F-CBA.

Conclusions

In our study anti-AChR F-CBA and RIPA both had excellent specificity, while F-CBA had 4% higher sensitivity for MG and detected anti-AChR in 21% of SNMG patients. Our findings indicate that F-CBA is a viable alternative to RIPA for anti-AChR detection.

Disclosure: Dr. Mirian has nothing to disclose. Dr. Nicolle has received personal compensation in the range of $500-$4,999 for serving on a Speakers Bureau for Alexion. Dr. Budhram has nothing to disclose.

Piloting an Advanced Neuroimmunology Elective for Neurology Residents

Sonia Kaur Singh, Rohini Samudralwar

Objective

To describe the creation of an Advanced Neuroimmunology elective for residents with a special interest in clinical neuroimmunology.

Background

There has been a dramatic change in the landscape of neuroimmune conditions with the discovery of new pathogenic autoantibodies, disease modifying therapies and wider availability of multidisciplinary care systems for patients. Most residencies do offer exposure to multiple sclerosis but with increasing interest in neuroimmunology and autoimmune neurological conditions, there is a gap in resident education to meet needs of this changing landscape.

Design/Methods

A curriculum for advanced neuroimmunology (NI) was developed for residents with special interest in clinical neuroimmunology. This two-week elective consisted of rotations through NI and affiliated multidisciplinary clinics to increase exposure to immune mediated neurological illnesses, appreciate their heterogeneity, and aid multidisciplinary approach. Department experts in various disease states related to neuroimmunology were contacted and based on interest and resident elective time, a schedule was set up for rotations through neuroinfectious diseases, pulmonary sarcoidosis clinic, neuro-oncology, neuropathology and rheumatology. An additional expectation was to work with the fellow on inpatient consults that came in through the 2 weeks. In addition to multiple sclerosis/neuroimmunology division didactics, residents are encouraged to attend other affiliated department conferences as well as present at interdepartmental meetings, such as neuro-rheumatology conference.

Results

The availability of this elective allowed increased exposure to neuroimmunological conditions outside the typical Multiple Sclerosis elective at UTHealth. It also has allowed for additional inter-departmental collaboration clinically. Since the initial pilot elective, more residents have requested this as an elective and will be surveyed about their experience.

Conclusions

There is an unmet need for MS and NI subspecialists. Exposure to the broad spectrum of neuroimmunological conditions through multidisciplinary collaborations during residency is instrumental to ensure future specialists have the foundations to adapt to this rapidly advancing field.

Disclosure: Dr. Singh has nothing to disclose. Dr. Samudralwar has received personal compensation in the range of $500-$4,999 for serving on a Scientific Advisory or Data Safety Monitoring board for Sanofi Genzyme. Dr. Samudralwar has received personal compensation in the range of $500-$4,999 for serving on a Speakers Bureau for Biogen. Dr. Samudralwar has received personal compensation in the range of $500-$4,999 for serving on a Speakers Bureau for EMD Serono.

A Case of Pembrolizumab (Anti-PD-1) Induced Encephalitis

Anza Zahid, Meryim Poursheykhi, Mujtaba Saeed, Ivo Tremont

Objective

N/A.

Background

PD-1 Immune checkpoint inhibitors (ICI) have been associated with neurologic immune-related adverse events including meningoencephalitis and limbic encephalitis that can manifest as paraneoplastic syndromes. We present a case of suspected pembrolizumab (anti PD-1) induced limbic encephalitis presenting as episodic aphasia.

Design/Methods

N/A.

Piloting an Advanced Neuroimmunology Elective for Neurology Residents

Sonia Kaur Singh and Rohini Samudralwar

Neurology 2022;99;S72
DOI 10.1212/01.wnl.0000903580.67771.39