

Moderator: Can you tell us a little about Central Nervous System (CNS) lupus and what happens to the brain?

Dr. Liang: There are many syndromes and I think we should go back to your comment that not everything that happens in a lupus patient has to do with lupus. So I think that some of the things that we describe are not common features and the connection between that and lupus is somewhat tenuous.

The most common one is cognitive complaints. That can happen is that lupus patients who are apparently well are describing difficulty with concentration, memory, doing two things simultaneously (very much the problem with ageing rheumatologists) and that occurs at much higher frequently than in similar populations like women with rheumatoid arthritis.

There are people who have various afflictions with one or more of the 12 cranial nerves. People who have trouble with one of the cranial nerves can result in double vision, trouble swallowing etc. etc. I can't get into all of them.

There are people who have seizures and this is probably the most dramatic presentation. I think this is the one area in which we have a little more to offer in terms of pathophysiology. For one reason or another, the CNS develops inflammation and causes abnormal electro activity and seizures.

There are people who present and die of coma. They can be a perfectly happy lupus patient who lapse into a coma and do not wake up or wake after a time from massive doses of steroids because we do not have anything else.

There is a syndrome where people develop inflammation of their spinal cord and either develops bilateral weakness or very high levels of paralysis, like in spinal cord injuries. Those are dramatic presentations and most everyone will get steroids because we give those in directly proportion to the anxiety we have about the patient and the animosity of the presentation.

There is a thing that looks like MS but it isn't. It is affliction where the nerves are like electrical wiring and myelin insulation that protects the nerves the gets stripped off. People with this develop abnormal neurological function with manifestation in the brain and in manifestations that correspond with damage below the spinal cord and, peripheral nerves.

Then people talk about psychosis which I think the most widely agreed psychosis occurs in lupus patients who are delirious from being deathly ill with lupus and they have inflammation everywhere. But there are less common presentations, quiet psychosis is apparent. People going through mental wards found that these people had primarily lupus rather than schizophrenia. There are very similar in presentation except one has other symptoms of lupus. People with psychosis are treated for the mental illness unless the person is deathly ill with multi system presentations of inflammation and psychosis.