SARS-CoV-2 Serologic Testing: Much Ado About...Antibodies?

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Abstract: Testing for antibodies to SARS-CoV-2 took the US by storm during the initial few months of the COVID-19 pandemic. Over 200 serologic tests rapidly flooded the market, some with questionable performance characteristics. Although the clinical utility of serologic assays for SARS-CoV-2 was not well defined, clinical laboratories, including ours, rapidly began evaluating serologic assays to implement for their clinical practice. This was in large part due to the skyrocketing demand for antibody testing from both clinicians and from patients who ‘just wanted to know’ whether they’d been infected already. But how do you validate assays when you don’t have positive samples? As a laboratory, how do you rapidly adapt to what seemed to be the constantly changing regulatory guidelines? How do you educate clinicians, the media and the lay public about what antibody results do and maybe more importantly, do not mean?

This session will review where we are with antibody testing for SARS-CoV-2 and what the future may look like. We’ll also discuss what some of the challenges were related to implementing a serologic test in the middle of a pandemic, and what lessons we learned, should we encounter a similar crisis in the future.

Learning Objectives:

1. Discuss the challenges related to implementation of serologic testing for SARS-CoV-2
2. Describe at least one misconception related to SARS-CoV-2 antibody testing
3. Identify the current and potentially future roles of antibody testing for SARS-CoV-2