

Memo

To: Island Physicians
From: Dr. Marvin Tesch
Date: April 4, 2012
Re: Mycoplasma IgM Testing

Starting April 10, 2012, we will be switching our method for Mycoplasma IgM testing. The sample will still be serum (red stoppered tube) that can be stable for 72 hours if stored in the fridge; availability and turnaround will remain the same

The new assay is ImmunoCard MYCOPLASMA a rapid enzyme immunoassay (EIA) method for the detection of IgM to *Mycoplasma pneumoniae* in serum.

Mycoplasma pneumonia is one of the major causes of community acquired pneumonia and usually presents as a protracted non-productive cough of greater than 3 weeks. It is most common in the age group of 5 to 20 years and rare in individuals less than 5 years or older than 50 years. The organism cannot be cultured and the best way of confirming a suspected infection is serological testing for IgM, usually after two weeks of an intractable non-productive cough.

Our new assay will be reported as positive (IgM to mycoplasma is present) or negative, as opposed to titers for our old assay. However, during evaluation we found that positive results are only obtained when the titer was >1:320 on our old assay; this means one will see far less positive results than reported before (previously Mycoplasma pneumonia could be suspected when titers where >1:40)

Clearly our old method had poor specificity with far too many false positive results. The new assay has been validated with the IWK where it is used (along with several other Provincial health laboratories), and has been shown to have excellent specificity and sensitivity. False positives are rare and false negatives can occur if testing is done too soon (usually before there has been a protracted cough and IgM levels have had the time to build up), or in older individuals where re-infection may illicit an IgG response only.

The major drawback on this new test will be increased costs (\$12/test as opposed to \$2/test for our old method). Hopefully this cost can be offset by improved utilization or ordering practices (please refrain from ordering the test in patients less than 5 or greater than 50 unless there is high clinical suspicion)

pc Bill Bylhouwer

