



Reflex testing in the laboratory

Robert had applied for a new life insurance policy and was required to have a comprehensive health check. His past history had revealed that his attendance at work was poor – he became tired very easily and the cause was never clear. A blood sample was sent to the laboratory for serum electrolytes, liver and kidney function tests. A CBC (complete blood count) was also ordered.

The results of the CBC showed no evidence of iron deficiency anemia. The chemistry results, including the albumin value, were all within the reference range for normality, except for the total protein result, which was elevated. This indicates that the globulin fraction of the serum was responsible for the elevation. When the patient's globulins are elevated, it could be due either to a discrete increase in one of the globulins or else due to a diffuse increase in many of them.

Using the serum that was leftover from the first tests, protein electrophoresis was

performed. This test separates the serum proteins from each other. This revealed a monoclonal band (i.e. a discrete increase) of protein in the beta-gamma region. Following up on this, the serum was used to perform immunoelectrophoresis. This identified the monoclonal band as being due to

taken for the original requests to do further testing.

Reflex testing, such as is shown in this example, is a cost-effective strategy and many laboratories use it. There are, of course, some obvious limitations. There must be a sufficient amount of sample for

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the immunoglobulin IgM. Subsequently a diagnosis of Waldenstrom's Macroglobulinemia was made.

The laboratory tests that were used in this case represent an example of the use of reflex testing in the laboratory. Without having an agreed upon protocol for reflex testing, the doctor would likely have to generate a new order and the patient would have a further venipuncture. To speed up the diagnostic process, the laboratory used the serum

further testing and the analyses to be assayed must be sufficiently stable. Consideration must also be given to scope of practice limitations. The CMLTO states that it is beyond the scope of practice (of MLTs) to order tests so this should only be done under the direction of licensed management personnel.

Reflex testing can be used as a valuable teaching tool, for instance, as part of an in-service training program. JLB ❖

Allied Health Professional Development Fund 2008-2009

The government of Ontario recognizes and values the important contribution made by allied health professionals to the health care system. The Allied Health Professional Development Fund is a *HealthForceOntario* initiative. This innovative health human resources strategy is designed to ensure the people of Ontario have access to the right number and mix of health care professionals, now and in the future.

For the third consecutive year, the government of Ontario is providing financial support for health professionals through the Allied Health Professional

Development Fund. Practicing members of nine allied health professions will be able to apply for as much as \$1500 for professional development courses and programs.

The purpose of the fund is to develop skills and enhance knowledge and leadership capacity among allied health professionals. This year, the fund will continue to provide grants for professional development opportunities completed between April 1, 2008 and March 31, 2009.

The eligible allied health professions are: Medical Laboratory Technology, Physiotherapy, Medical Radiation Technology,

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Occupational Therapy, Speech Language Pathology, Audiology, Dietetics, Pharmacy and Respiratory Therapy.

To further support professional development, the Fund has invested in a three-year subscription to an electronic health library that is currently available to practicing members of the eligible allied health professions. This library gives health professionals access to the most recent health care literature to help determine the best approach to evidence-based practice.

The guidelines and application form for the Fund and information on the library service is available at: www.ahpdf.ca. ❖