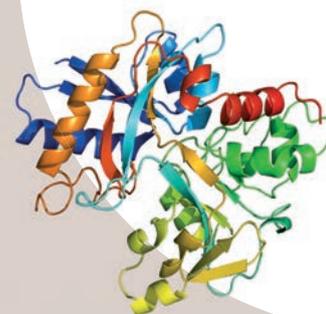


Sebia Focus - N°12

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Dr De Bruyne - Dr Huet interview Biorance Laboratory, Tinteniac, France

Dr De Bruyne, Dr Huet, can you please introduce yourselves and describe the TINTENIAC Laboratory to us? What work is carried out in your laboratory?

The TINTENIAC technical support center includes daily monitoring of 20 sampling sites surrounding the city of Rennes and its northern region part of Ile et Vilaine. 250 collaborators work in the BIORANCE society including 28 biologists. We are 3 biologists responsible for the technical support center: Dr. De Bruyne, Dr. Huet and Dr. Pichard. The technical support center opened in December 2010, and our overall activities are around 3000 cases per day. We conduct 22,000 protein electrophoresis, approximately 1100 immunotyping, 300 Bence Jones protein and 5500 CDT assays per year.

How long has SEBIA been your partner? What are the tests that you already perform with SEBIA products? What systems are you using?

We have worked with SEBIA for over 30 years. We initially carried out our analysis using agarose gel electrophoresis before acquiring a CAPILLARYS for the protein electrophoresis, which we also use for immunotyping and the CDT assay.

We are satisfied with the services offered by SEBIA, our partnership is sustainable and we have a good overall support. SEBIA is a recognized supplier offering high-quality reliable systems. From time to time we also utilize their scientific education department especially for protein electrophoresis and immunotyping interpretation.

How long have you performed the CDT assay? What prompted you to add this test?

We have performed the CDT assay since 2002. The increasing number of tests, which in part was due to the expansion of our structure, has motivated us to carry out the CDT testing, which we were previously sending to a secondary laboratory.

Let's talk about the marker itself, can you briefly remind us what CDT is and the use of this test?

The measurement of the CDT (Carbohydrate-Deficient Transferrin) consists of measuring the slightly sialylated and desialylated transferrin forms. Indeed transferrin protein exists in different isoforms, indirectly the consumption of alcohol induces a deglycosylation of this protein without changing the rate of total transferrin. We measure the percentage of the 2-sialo and 0-sialo forms relative to all the transferrin isoforms. The CDT assay is prescribed for two major indications: the detection of alcohol excessive consumption and the monitoring of abstinence.

Where do the majority of prescriptions come from?

About 50% of our requests come from the driving licence authority in the context of licence withdrawals. Occupational medicine represents approximately 25% of our CDT activity and the remaining 25% are distributed among General Practitioners, insurers or other requirements.



What are your views on the benefits of the CDT marker compared to traditional markers used (γ GT, MCV, ASAT and ALAT)?

The measurement of the γ GT alone does not allow the screening of chronic alcoholism in the population, it is therefore necessary to associate it with the CDT test. The very good specificity of CDT test makes it the best marker currently available for measuring excessive alcohol consumption. Indeed, this marker is more specific than γ GT and has less interference (drug, liver pathology ...). A daily alcohol consumption of 50 to 80 g will increase the CDT. The half-life of this marker is very short, from 14 to 17 days, meaning the return to normal takes about 4 weeks of abstinence compared to two months for γ GT. This therefore means CDT is an excellent marker of alcohol withdrawal that allows early diagnosis of relapse.

Do you think the CDT / γ GT combination has an advantage? Why?

Yes, the association of the CDT marker with γ GT increases the predictive value of the test. If these two markers rise, alcohol consumption could be considered excessive.

What are the benefits of the SEBIA CAPILLARYS CDT assay?

The first advantage that we can mention is the ease of the results interpretation. Indeed electrophoresis profiles are clear and the different isoforms of transferrin are well separated. The software can also detect variants of transferrin. CAPILLARYS is an automated system with a high throughput and complete traceability of results. In addition the CAPILLARYS 2, which we use for CDT assay, also serves as a back-up for the serum electrophoresis and immunotyping activities that are performed on a second CAPILLARYS 2. Moreover via Phoresis CORE software, we can access of all our patient's histories on the 2 instruments. The CDT assay on CAPILLARYS matches the current needs of laboratories.



Biorance's laboratory, Tinteniac, France

Since you implemented this test, have you noticed an increase in activity? How is your work organised?

Yes, we have just established a collaboration agreement with occupational medicine. Our activity has thus increased by 25%. Our organization has consequently evolved; today we run this test 5 days a week compared to the 3 runs per week we were carrying out before the new contract. This allows us to rapidly report results.

Have you ever taken any action to inform prescribing physicians of the value of this marker or do you plan?

We haven't taken any action. However we believe that physicians are generally not well informed about the benefits of this test, it might therefore be beneficial to set up information notes to target the physicians. The prescriber's information card offered by SEBIA would be a useful support.

In conclusion, what are the key points that you would highlight to recommend the CAPILLARYS / MINICAP SEBIA CDT assay for capillary electrophoresis to other laboratories?

The CDT assay is relevant and very specific to confirm the suspicion of alcohol consumption and to detect early relapse. This test is easily done on an automated capillary electrophoresis on a daily basis. It is easy to integrate this reliable and robust test in the routine activity of a laboratory. We would say that the quality of this test offered by SEBIA is consistent with other tests currently offered.

